

02-8705-10-SR

Rev. No. 0

**FINAL DRAFT
SITE INSPECTION REPORT
ALSY MANUFACTURING
HICKSVILLE, NEW YORK**

COMPLETED

PREPARED UNDER

**TECHNICAL DIRECTIVE DOCUMENT NO. 02-8705-10
CONTRACT NO. 68-01-7346**

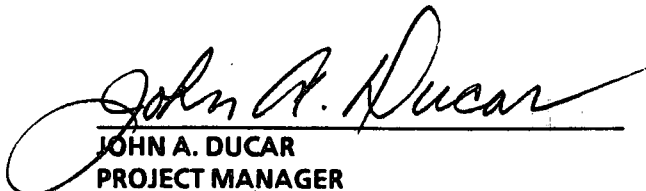
FOR THE

**ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY**

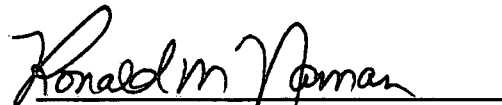
APRIL 4, 1988

**NUS CORPORATION
SUPERFUND DIVISION**

SUBMITTED BY:


**JOHN A. DUCAR
PROJECT MANAGER**

REVIEWED/APPROVED BY:


**RONALD M. NAMAN
FACILITY MANAGER
REGION 2**

286073



Contents

Section

- 1 Site Inspection Report Executive Summary
- 2 Environmental Protection Agency Form 2070-13
- 3 Maps and Photographs
- 4 Bibliography of Information Sources
- 5 Press Release Summary
- 6 Background Information

SECTION 1

SITE INSPECTION REPORT EXECUTIVE SUMMARY



02-8705-10-SR
Rev. 0

**POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
EXECUTIVE SUMMARY**

Alsy Manufacturing
Site Name

NYD981184237
EPA Site ID Number

270 Duffy Avenue
Hicksville, New York 11801
Address

02-8705-10
TDD Number

SITE DESCRIPTION

Alsy Manufacturing is an active site where lamps and lamp shades are produced. It is located on the north side of Duffy Avenue in a densely populated industrial/residential area of Hicksville, Nassau County, New York.

Metal plating, finishing, and painting processes generate a variety of wastes, mainly solvents and heavy metals. The site has a past history of poor housekeeping practices. In 1984, Alsy was inspected by the New York State Department of Environmental Conservation (NYSDEC) and the Nassau County Department of Health. Unauthorized discharges and violations of the plant's State Pollutant Discharge Elimination System (SPDES) permit were discovered. Laboratory analysis of soil samples collected from the area behind the building indicated elevated levels of heavy metals and volatile organics. Alsy was ordered to cease all discharges and to clean up the contaminated areas. A criminal investigation had been conducted on the company. The criminal proceedings against the company were dismissed with prejudice in April 1987. Alsy Manufacturing agreed to pay a civil fine.

To date, the plant has cleaned out the leaching cesspools previously used to dispose of wastewater and removed the contaminated soil around them. The plant is currently under permit to discharge its treated wastewater into the sanitary sewer system.

On June 16, 1987, under direction of EPA Region 2, the NUS FIT team conducted a site inspection at Alsy Manufacturing which included collection of two groundwater samples, one sewer sample, and six soil samples.

(CONT'D)

Prepared by: John A. Ducar
of NUS Corporation

Date: 04/04/88

02-8705-10-SR
Rev. 0

**POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
EXECUTIVE SUMMARY**

Results of analyses of these samples showed groundwater contamination with 1,1,1-trichloroethane and a number of heavy metals above the Federal Drinking Water Standards. Soil sample analyses revealed high concentrations of a number of organics and inorganics, including cyanide, as well as PCBs and pesticides. The sewer sample revealed small concentrations of 1,1,1-trichloroethane. It should be noted that cyanide analysis for aqueous samples did not pass QA/QC, due to the fact the samples exceeded allowed holding time at the lab.

SECTION 2

ENVIRONMENTAL PROTECTION AGENCY FORM 2070-13

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0981194237

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) 02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Alsy Manufacturing 270 Duffy Avenue
03 CITY 04 STATE 05 ZIP CODE 06 COUNTY 07 COUNTY CODE 08 CONG DIST.
Hicksville (Town of Oyster Bay) NY 11801 Nassau 059 04
09 COORDINATES 10 TYPE OF OWNERSHIP (Check one)
LATITUDE LONGITUDE
4 00 4 5' 4 7" N 0 7 30 3 2' 3 0" W
X A. PRIVATE B. FEDERAL C. STATE
D. COUNTY E. MUNICIPAL F. OTHER
G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 02 SITE STATUS 03 YEARS OF OPERATION
06 / 16 / 87 X ACTIVE 1975 / Still Active UNKNOWN
MONTH DAY YEAR INACTIVE BEGINNING YEAR ENDING YEAR
AGENCY PERFORMING INSPECTION (Check all that apply)
A. EPA X B. EPA CONTRACTOR NUS Corp. C. MUNICIPAL D. MUNICIPAL CONTRACTOR
(Name of firm) (Name of firm)
E. STATE F. STATE CONTRACTOR G. OTHER
(Name of firm) (Specify)

05 CHIEF INSPECTOR 06 TITLE 07 ORGANIZATION 08 TELEPHONE NO.
John A. Ducar Geologist NUS Corp. (201) 225-6160
09 OTHER INSPECTORS 10 TITLE 11 ORGANIZATION 12 TELEPHONE NO.
Brian Pedersen Chemical Engineer NUS Corp. (201) 225-6160
Pete Morton Geologist NUS Corp. (201) 225-6160
Randy Rice Geologist NUS Corp. (201) 225-6160
Dan deBruijn Field Technician NUS Corp. (201) 225-6160
Sue Lenczyk Field Technician NUS Corp. (201) 225-6160

13 SITE REPRESENTATIVES INTERVIEWED 14 TITLE 15 ADDRESS 16 TELEPHONE NO.
Burt Robbins Plant Manager 270 Duffy Avenue (516) 822-5252
Hicksville, NY
Bob Derosa Emergency Coordinator 270 Duffy Avenue (516) 822-5252
Hicksville, NY

17 ACCESS GAINED BY 18 TIME OF INSPECTION 19 WEATHER CONDITIONS
(Check one)
X PERMISSION 0700 Sunny, hot, 85-90°F, winds 0-5 mph NW.
WARRANT

IV. INFORMATION AVAILABLE FROM

01 CONTACT 02 OF (Agency/Organization) 03 TELEPHONE NO.
Diana Messina U.S. EPA Region 2 (201) 321-6776
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM 05 AGENCY 06 ORGANIZATION 07 TELEPHONE NO. 08 DATE

John A. Ducar U.S. EPA NUS Corp. FIT 2 (201) 225-6160 06 / 25 / 87
MONTH DAY YEAR
EPA FORM 2070-13 (7-81) 02-8705-10-SR
Rev. No. 0

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981184237

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)		02 WASTE QUANTITY AT SITE		03 WASTE CHARACTERISTICS (Check all that apply)	
- A. SOLID	E. SLURRY	(Measures of waste quantities must be independent)	TONS CUBIC YARDS NO. OF DRUMS	X A. TOXIC	E. SOLUBLE
- B. POWDER, FINES	X F. LIQUID			- B. CORROSIVE	- F. INFECTIOUS
X C. SLUDGE	- G. GAS			X C. RADIOACTIVE	- G. FLAMMABLE
- D. OTHER	(Specify)			X D. PERSISTENT	- H. IGNITABLE
			Unknown	X I. HIGHLY VOLATILE - J. EXPLOSIVE - K. REACTIVE - L. INCOMPATIBLE - M. NOT APPLICABLE	

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	Unknown		
IOC	INORGANIC CHEMICALS	Unknown		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Nickel	7440-02-0	TK/OD/DR	88.5*	mg/L
MES	Chromium	7440-47-3	TK/OD/DR	530	ug/L
MES	Arsenic	7440-38-2	TK/OD/DR	302	ug/L
MES	Lead	7439-92-1	TK/OD/DR	341	ug/L
MES	Cadmium	7440-43-9	TK/OD/DR	0.33*	mg/L
IOC	Cyanide	57125	TK/OD/DR	182	mg/kg
SOL	Methylene chloride	75-09-2	TK/OD/DR	600*	ug/L
SOL	1,1,1-Trichloroethane	71-55-6	TK/OD/DR	600*	ug/L
SOL	1,1-Dichloroethane	75-34-3	TK/OD/DR	600*	ug/L
SOL	Toluene	108-88-3	TK/OD/DR	600*	ug/L
OCC	Ethyl benzene	100-41-4	TK/OD/DR	860	ug/L
MES	Barium	7440-39-3	TK/OD/DR	2210	ug/kg
MES	Beryllium	7440-41-7	TK/OD/DR	36	ug/kg
MES	Manganese	7439-96-5	TK/OD/DR	14700	ug/kg
MES	Mercury	7439-97-6	TK/OD/DR	3.2	ug/kg
OCC	Dimethyl phthalate	131-11-3	TK/OD/DR	510	ug/kg
OCC	Diethyl phthalate	84-66-2	TK/OD/DR	15J	ug/kg
OCC	Phenanthrene	85-01-8	TK/OD/DR	250J	ug/kg
OCC	Di-n-Butylphthalate	84-74-2	TK/OD/DR	58000	ug/kg
OCC	Fluoranthene	206-44-0	TK/OD/DR	71	ug/kg
OCC	Pyrene	129-00-0	TK/OD/DR	490J	ug/kg
OCC	Butylbenzyl phthalate	85-68-7	TK/OD/DR	2100	ug/kg
OCC	Bis(2-ethylhexyl)phthalate	117-81-7	TK/OD/DR	2800	ug/kg
OCC	Chrysene	218-01-9	TK/OD/DR	480J	ug/kg
OCC	Di-n-octyl phthalate	117-84-0	TK/OD/DR	140J	ug/kg
OCC	Benzo(a)anthracene	56-55-3	TK/OD/DR	42J	ug/kg
OCC	Benzo(b)fluoranthene	205-99-2	TK/OD/DR	440J	ug/kg
OCC	Benzo(k)fluoranthene	207-08-9	TK/OD/DR	60J	ug/kg
OCC	Benzo(a)pyrene	50-32-8	TK/OD/DR	280J	ug/kg
OCC	Total Xylenes	1330-20-7	TK/OD/DR	6200	ug/kg
OCC	Aroclor 1254	11097-69-1	TK/OD/DR	16,000	ug/kg
OCC	Aroclor 1260	11096-82-5	TK/OD/DR	3900	ug/kg
PSD	4,4'-DDE	72-55-9	TK/OD/DR	170	ug/kg
PSD	4,4'-DDD	72-54-8	TK/OD/DR	53	ug/kg
PSD	4,4'-DDT	50-29-3	TK/OD/DR	210	ug/kg
OCC	Tetrachloroethene	127-18-4	TK/OD/DR	35	ug/kg
OCC	Carbon Disulfide	75-15-0	TK/OD/DR	27	ug/kg

TK = tank OD = open dump DR = drum

* NYSDEC Analysis J = below contract detection limit, but above instrument detection limit

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Xylene	1330-20-7	FDS	Copper Cyanide	4-49-23
FDS	Acetone	67-64-1	FDS	1,1,1-Trichloroethane	71-55-6
FDS	Methylene Chloride	75-09-2	FDS		
FDS	Zinc Cyanide	55-72-11	FDS		

VI. SOURCES OF INFORMATION (See specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.

NUS Corporation Region 2 FIT site inspection, conducted on 6/16/87, TDD No. 02-8705-10.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0981184277

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION 02 ☒ OBSERVED (DATE: 6/16/87) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 137,959 04 NARRATIVE DESCRIPTION

There is observed groundwater contamination which may be attributed to leaching cesspools used in the past to discharge the wastes. This observation arises from the fact that discharge limits were exceeded and unpermitted discharges took place. The soil in the area is very sandy and has a high permeability. There are two unconfined aquifers in the area of the site that are hydraulically connected: the Upper Glacial Aquifer, which is located 100-150 feet below the surface of the ground, and the Magothy Aquifer, located 150-700 feet below the surface, which is the only aquifer used for public drinking supply in the area. Analysis of samples collected during the NUS site inspection revealed high levels of heavy metals in the groundwater.

01. B. SURFACE WATER CONTAMINATION 02 OBSERVED (DATE:) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

There is no potential for surface water contamination since there are no bodies of water downgradient within a 3-mile radius of the site.

01 C. CONTAMINATION OF AIR 02 OBSERVED (DATE:) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

There is no potential for contamination of the air since the contaminants are confined to the groundwater, soil, and possibly the sewer system. There were no readings above background on the OVA or HNu in the ambient air.

01. ☒ D. FIRE/EXPLOSIVE CONDITIONS 02 OBSERVED (DATE:) ☒ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 73,271 04 NARRATIVE DESCRIPTION

There is a slight potential for fire/explosive conditions since many of the solvents kept on site are flammable. Alsy Manufacturing has had several fires at the site within the past 2 years. It is not known, however, if the fires can be attributed to wastes stored at the site.

01. ☒ E. DIRECT CONTACT 02 OBSERVED (DATE:) ☒ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 13,611 04 NARRATIVE DESCRIPTION

There is potential for direct contact with soil on the site. The plant is active and there are openings in the fence that surrounds the perimeter of the property. Sampling results by the NYSDEC in 1984 indicated that there were hazardous substances present in the soil. Alsy has allegedly removed the contaminated soil, but there were no State or local agency representatives present to observe the cleanup. Analysis of samples collected during the NUS site inspection revealed contamination of the soil on site.

01 ☒ F. CONTAMINATION OF SOIL 02 ☒ OBSERVED (DATE: 02/84, 6/16/87) _ POTENTIAL _ ALLEGED
03 AREA POTENTIALLY AFFECTED: 2.3 (ACRES) 04 NARRATIVE DESCRIPTION

There is confirmed contamination of the soil from alleged unauthorized discharge of wastewater onto the ground surface in 1984. NYSDEC observed stained soil on the site. The NUS site inspection revealed the presence of several inorganic and organic compounds, as well as PCBs and pesticides in the soils and sediments collected at the site. Soil samples were collected 1-2 feet below the surface. Airborne particulate problems are minimal.

01. ☒ G. DRINKING WATER CONTAMINATION 02 OBSERVED (DATE:) ☒ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 137,959 04 NARRATIVE DESCRIPTION

There is potential for drinking water contamination due to the fact that discharge permit limits were exceeded in the past. Also, unpermitted discharges allegedly took place, and the population depends on groundwater as its sole source of drinking water. Samples taken during the NUS site inspection revealed groundwater contamination at the site.

01 ☒ H. WORKER EXPOSURE/INJURY 02 OBSERVED (DATE:) ☒ POTENTIAL _ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: Unknown 04 NARRATIVE DESCRIPTION

There is potential for worker exposure or injury due to the presence of contaminated soil on the site.

01 ☒ I. POPULATION EXPOSURE/INJURY 02 OBSERVED (DATE:) ☒ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 137,959 04 NARRATIVE DESCRIPTION

There is potential for population exposure/injury via groundwater contamination of the Upper Glacial Aquifer. Groundwater is the sole source of drinking water in the area surrounding the site. There is also potential for population exposure via direct contact with hazardous substances in the soil on site.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0981194237

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED

There is no potential for damage to flora. The waste is currently treated inside the building before being discharged to the sanitary sewer system.

01 K. DAMAGE TO FAUNA

04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED

There is no potential for damage to fauna. The area within a 3-mile radius of the site is urban.

01 L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED

There is no potential for contamination of the food chain. Groundwater is not used for irrigation in the area, and there is no surface water within a 3-mile radius of the site.

01 X M. UNSTABLE CONTAINMENT OF WASTES
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: 13,611

02 X OBSERVED (DATE: 08/01/84) _ POTENTIAL _ ALLEGED

04 NARRATIVE DESCRIPTION

The Nassau County Department of Health observed an unauthorized discharge of wastewater onto the ground. Stained soil, possibly from leaking drums on the site, was also observed. Wastes in the past were discharged to leaching cesspools.

01 X N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED

The potential for damage to off-site property exists since contaminants may migrate off site via the groundwater or the storm sewers.

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTps
04 NARRATIVE DESCRIPTION

02 X OBSERVED (DATE: 6/16/87) _ POTENTIAL _ ALLEGED

There is no significant potential for contamination of sewers since the wastewater is currently treated before being discharged into the sanitary sewer system under permit. The NUS site inspection revealed contamination of a storm sewer with trace amounts of 1,1,1 trichloroethane on the site.

01 X P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 X OBSERVED (DATE: 08/01/84) _ POTENTIAL _ ALLEGED

The Nassau County Department of Health (NCDH) observed unauthorized discharges of wastewater onto the ground surface. Also, the NCDH has reported that Alsy Manufacturing had exceeded its SPDES discharge permit on a number of instances in 1984.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 137,959

IV. COMMENTS

The site has been under investigation by the NYSDEC and the Nassau County Department of Health since 1984. All of the violations have been resolved within the past 2 years (1986).

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.
NUS Corporation on-site reconnaissance conducted on 06/05/87, TDD No. 02-8705-10.
NUS Corporation site inspection conducted on 06/16/87, TDD No. 02-8705-10.
General Software Corporation, 1984, GEMS, Graphic Exposure Modeling System.
Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water - Management Alternatives, Geological Survey Professional Paper 627 - F.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0981194237

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input checked="" type="checkbox"/> G. STATE (Specify) SPDES	NY0102539	1977	1984	Discharge of industrial wastes.
<input checked="" type="checkbox"/> H. LOCAL (Specify) Sewer	21	05/15/87	05/15/90	Industrial discharge to sewers.
<input type="checkbox"/> I. OTHER (Specify)				
<input type="checkbox"/> J. NONE				

III. SITE DESCRIPTION

01 Storage/Disposal (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input checked="" type="checkbox"/> C. DRUMS, ABOVE GROUND	Unknown		<input checked="" type="checkbox"/> C. CHEMICAL/PHYSICAL	1
<input checked="" type="checkbox"/> D. TANK, ABOVE GROUND	Unknown		<input type="checkbox"/> D. BIOLOGICAL	06 AREA OF SITE
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input type="checkbox"/> F. LANDFILL			<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	2.3
<input checked="" type="checkbox"/> H. OPEN DUMP	Unknown		<input type="checkbox"/> H. OTHER (Specify)	(Acres)
<input type="checkbox"/> I. OTHER (Specify)				

07 COMMENTS

Alsy Manufacturing had an SPDES permit for one sanitary cesspool and three industrial cesspools authorized to receive various metals. However, Alsy violated this permit by using unauthorized point sources, use of sanitary system for discharge of industrial pollutants, discharges above allowable permit limits, violation of effluent standards, and discharge of unauthorized pollutants, particularly solvents. NYSDEC inspectors have discovered contaminated soil on the site.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

<input checked="" type="checkbox"/> A. ADEQUATE, SECURE (Present)	<input type="checkbox"/> B. MODERATE	<input checked="" type="checkbox"/> C. INADEQUATE, POOR (Past)	<input type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS
--	--------------------------------------	---	--

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

In the past, wastewater was disposed of in on-site leaching pits which discharged wastes directly to the groundwater. Also, the pits overflowed onto the ground surface on occasion. On August 1, 1984, NYSDEC inspectors observed stained soil and pavement on the site. Currently, the wastewater is treated inside the building before being discharged to the Nassau County Sewer System.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE:	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
-----------------------------	------------------------------	--

02 COMMENTS

Before being discharged into the sanitary sewer system, the wastes are kept and treated in tanks inside the building. A secondary containment consisting of an impervious berm constructed of fiberglass-covered concrete surrounds the tanks. The contaminated soils are below the surface of the ground.

VI SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.
NUS Corporation Region 2 FIT on-site reconnaissance conducted on 06/05/87, TDD No. 02-8705-10.
NUS Corporation Region 2 FIT site inspection conducted on 06/16/87, TDD No. 02-8705-10.
Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water - Management Alternatives, Geological Survey Professional Paper 627 - F.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981184237

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY
(Check as applicable)

02 STATUS

03 DISTANCE TO SITE

COMMUNITY
NON-COMMUNITY

SURFACE
A. ☐
C. ☐

WELL
B. ☒
D. ☐

ENDANGERED
A. ☐
D. ☐

AFFECTED
B. ☐
E. ☐

MONITORED
C. ☒
F. ☐

A. 0.61 (mi)
B. (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION ☐ D. NOT USED, UNUSEABLE
(Other sources available) (Limited other sources available)
COMMERCIAL,
INDUSTRIAL,
IRRIGATION
(No other water sources available)

02 POPULATION SERVED BY GROUND WATER: 137,959

03 DISTANCE TO NEAREST DRINKING WATER WELL: 0.61 (mi)

04 DEPTH TO GROUNDWATER

05 DIRECTION OF GROUNDWATER FLOW

06 DEPTH TO AQUIFER
OF CONCERN

07 POTENTIAL YIELD
OF AQUIFER

08 SOLE SOURCE AQUIFER

60 (ft)

north to south

60 (ft)

2,016,000 (gpd)

☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Public drinking water wells are installed to a depth of 500-600 feet to the Magothy Formation. Private wells average 100-200 feet in depth to Upper Glacial aquifer. All wells are located within a well-populated urban area. The two aquifers are hydraulically connected. There is no substantial confining layer dividing the two formations in the area of the site.

10 RECHARGE AREA

11. DISCHARGE AREA

☒ YES
☐ NO

COMMENTS There are a large number of recharge basins in the area.

☒ YES
☐ NO

COMMENTS

There is no surface water within a 3-mile radius of the site.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION ☐ B. IRRIGATION, ECONOMICALLY ☐ C. COMMERCIAL, INDUSTRIAL ☒ D. NOT CURRENTLY USED
DRINKING WATER SOURCE IMPORTANT RESOURCES

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:

AFFECTED

DISTANCE TO SITE

None within 3 miles

(mi)

(mi)

(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

02 DISTANCE TO NEAREST POPULATION

ONE (1) MILE OF SITE

TWO (2) MILES OF SITE

THREE (3) MILES OF SITE

A. 13,611
NO. OF PERSONS

B. 73,271
NO. OF PERSONS

C. 137,959
NO. OF PERSONS

0.01 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

04 DISTANCE TO NEAREST OFF-SITE BUILDING

22,297

adjacent (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site. e.g., rural, village, densely populated urban area)

The site is located on the north side of Duffy Avenue in a densely populated industrial/residential section of Hicksville, New York. To the north of Duffy Avenue, the area is mainly industrial with a variety of factories and office buildings. To the south of the street and surrounding areas lies a densely populated residential neighborhood.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981184237

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} - 10^{-8} cm/sec ☐ B. 10^{-4} - 10^{-6} cm/sec ☐ C. 10^{-4} - 10^{-3} cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☒ A. IMPERMEABLE
(Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE
(10^{-4} - 10^{-6} cm/sec) ☐ C. RELATIVELY PERMEABLE
(10^{-2} - 10^{-4} cm/sec) ☐ D. VERY PERMEABLE
(Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK

1100 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

20 (ft)
(approx. depth of cesspools)

05 SOIL pH

6.55 - 8.15

06 NET PRECIPITATION

14 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.5 (in)

08 SLOPE

SITE SLOPE

0-2 %

DIRECTION OF SITE SLOPE

Southwest

TERRAIN AVERAGE SLOPE

0.4 %

09 FLOOD POTENTIAL

10

SITE IS IN 500 YEAR FLOODPLAIN

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

OTHER

A. > 2 (mi)

B. > 1 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 1 (mi)

ENDANGERED SPECIES: N/A

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

RESIDENTIAL AREAS: NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVES

AGRICULTURAL LANDS

PRIME AG LAND

AG LAND

A. adjacent (mi)

B. 0.02 (mi)
(residential homes)

C. > 2 (mi)

D. > 2 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located in a relatively flat area of Long Island. Elevation is approximately 135 feet above sea level, with a gentle slope of 0.4 percent to the southwest. There are excavated gravel pits approximately one-quarter mile to the northwest and west of the site with depths of about 40 feet.

VII SOURCES OF INFORMATION (Cite specific references e.g., state files, sample analysis, reports)

NUS Corporation Region 2 FIT site inspection, conducted 06/16/87 TDD No. 02-8705-10.

U.S. Dept. of the Interior, Geological Survey Topographic Map, 7.5 minute series, "Hicksville Quadrangle, NY", 1967 Revised 1979.

New York State Department of Environmental Conservation Files.

Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water - Management Alternatives, Geological Survey Professional Paper 627 - F.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981194237

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	2	Organics: York Laboratories 200 Monroe Turnpike Monroe, CT 06468 Attn: John Culick	Results Received: 10/7/87
SURFACE WATER	1		
WASTE			
AIR			
RUNOFF			
SPILL		Inorganics: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: Ken Erondy	Results Received: 1/19/88
SOIL	6		
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Air Monitoring OVA/HNu	Readings above background were observed on the well behind the Cycle II warehouse: OVA 30 ppm, HNu 15 ppm. Also, above-background readings were observed on a sanitary basin in the loading area: OVA 8 ppm, HNu 10 ppm.
Draeger Tubes	No readings were detected on the cyanide, toluene, or ethyl benzene Draeger tubes used on the well behind the Cycle II warehouse.
Radiation	The Radiation Mini-alert was used to monitor for radiation. No readings above background were observed.

IV. PHOTOGRAPHS AND MAPS

01 TYPE	<input checked="" type="checkbox"/> GROUND <input checked="" type="checkbox"/> AERIAL	02 IN CUSTODY OF	NUS Corp. FIT 2, Edison, New Jersey (Name of organization or individual)
03 MAPS	04 LOCATION OF MAPS		
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	NUS Corp. FIT 2 Project Files, Edison, NJ		

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Field notes recorded in Field Notebook No. 0082, filed under TDD No. 02-8705-10.
Photolog of photos taken on 06/16/87, filed under TDD No. 02-8705-10.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS Corp. Region 2 FIT Site Reconnaissance conducted 06/05/87, TDD No. 02-8705-10.
NUS Corp., Region 2 FIT, site inspection conducted on 06/16/87, TDD No. 02-8705-10.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981194237

II. CURRENT OWNER(S)

01 NAME 02 D + B NUMBER 08 NAME 09 D + B NUMBER

Surrey Corp. (property owner)
03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 10 STREET ADDRESS (P.O. Box, RFD#, etc.) 11 SIC CODE

6901 Jericho Turnpike
05 CITY 06 STATE 07 ZIP CODE 12 CITY 13 STATE 14 ZIP CODE
Syosset NY 11791

01 NAME 02 D + B NUMBER 08 NAME 09 D + B NUMBER

Aisy Manufacturing (factory owner)
03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 10 STREET ADDRESS (P.O. Box, RFD#, etc.) 11 SIC CODE

270 Duffy Avenue
05 CITY 06 STATE 07 ZIP CODE 12 CITY 13 STATE 14 ZIP CODE
Hicksville NY 11801

01 NAME 02 D + B NUMBER 08 NAME 09 D + B NUMBER

03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 10 STREET ADDRESS (P.O. Box, RFD#, etc.) 11 SIC CODE

05 CITY 06 STATE 07 ZIP CODE 12 CITY 13 STATE 14 ZIP CODE

01 NAME 02 D + B NUMBER 08 NAME 09 D + B NUMBER

03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 10 STREET ADDRESS (P.O. Box, RFD#, etc.) 11 SIC CODE

05 CITY 06 STATE 07 ZIP CODE 12 CITY 13 STATE 14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME 02 D + B NUMBER 01 NAME 02 D + B NUMBER

Balatem Realty
03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE

Unknown
05 CITY 06 STATE 07 ZIP CODE 05 CITY 06 STATE 07 ZIP CODE

01 NAME 02 D + B NUMBER 01 NAME 02 D + B NUMBER

03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE

05 CITY 06 STATE 07 ZIP CODE 05 CITY 06 STATE 07 ZIP CODE

01 NAME 02 D + B NUMBER 01 NAME 02 D + B NUMBER

03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE 03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE

05 CITY 06 STATE 07 ZIP CODE 05 CITY 06 STATE 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0081194237

II. CURRENT OPERATOR(S)

CURRENT OPERATOR(S)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER		
Alsy Manufacturing					
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)		13 SIC CODE	
270 Duffy Avenue					
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Hicksville NY 11801					
08 YEARS OF OPERATION	09 NAME OF OWNER				
12	Surrey Corp.				

III. PREVIOUS OPERATOR(S) (List most recent first:

Provide only if different from owner)

PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)

PREVIOUS OPERATOR(S)			PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)		
01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER		
Metalab Equipment Corp.					
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)		13 SIC CODE	
270 Duffy Avenue					
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
Hicksville NY 11801					
08 YEARS OF OPERATION	09 NAME OF OWNER				

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER		
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)		13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D081124237

II ON-SITE GENERATOR

01 NAME 02 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.) 04 SIC CODE
05 CITY 06 STATE 07 ZIP CODE

III OFF-SITE GENERATOR(S)

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
05 CITY	06 STATE	05 CITY	06 STATE
	07 ZIP CODE		07 ZIP CODE

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
05 CITY	06 STATE	05 CITY	06 STATE
	07 ZIP CODE		07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
Techtronic Ecological Co.			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
Walworth Street			
05 CITY	06 STATE	05 CITY	06 STATE
Brooklyn	NY		
	11205		

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
Chemical Management Inc.			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
340 Eastern Parkway			
05 CITY	06 STATE	05 CITY	06 STATE
Farmingdale	NY		
	11735		

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Alsy Manufacturing waste manifests and records, 1987.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0981194237

II. PAST RESPONSE ACTIVITIES

01 A. WATER SUPPLY CLOSED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 B. TEMPORARY WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 C. PERMANENT WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 D. SPILLED MATERIAL REMOVED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 X E. CONTAMINATED SOIL REMOVED
04 DESCRIPTION

02 DATE: 1985

03 AGENCY: _____

Alsy Manufacturing removed soil around leaching cesspools, but the operation was not observed by any State or local authorities.

01 F. WASTE REPACKAGED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 X G. WASTE DISPOSED ELSEWHERE
04 DESCRIPTION

02 DATE: 1985

03 AGENCY: _____

The removed soil was taken off site and disposed of elsewhere by a contractor for Alsy Manufacturing, without supervision by any State or local authorities.

01 H. ON SITE BURIAL
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 I. IN SITU CHEMICAL TREATMENT
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 J. IN SITU BIOLOGICAL TREATMENT
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 K. IN SITU PHYSICAL TREATMENT
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 L. ENCAPSULATION
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 M. EMERGENCY WASTE TREATMENT
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 N. CUTOFF WALLS
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 O. EMERGENCY DIKING/SURFACE WATER DIVERSION
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 P. CUTOFF TRENCHES/SUMP
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 Q. SUBSURFACE CUTOFF WALL
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0921194227

II. PAST RESPONSE ACTIVITIES

01 R. BARRIER WALLS CONSTRUCTED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 S. CAPPING/COVERING
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 T. BULK TANKAGE REPAIRED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 U. GROUT CURTAIN CONSTRUCTED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 V. BOTTOM SEALED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 W. GAS CONTROL
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 X. FIRE CONTROL
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 Y. LEACHATE TREATMENT
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 Z. AREA EVACUATED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 1. ACCESS TO SITE RESTRICTED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 2. POPULATION RELOCATED
04 DESCRIPTION

02 DATE: _____

03 AGENCY: _____

No previous history.

01 X 3. OTHER REMEDIAL ACTIVITIES
04 DESCRIPTION

02 DATE: 1985

03 AGENCY: _____

The leaching cesspools were cleaned out by Aisy Manufacturing, and the sludge was removed off site without supervision by State or local authorities. The cesspools are no longer in use.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

New York State Department of Environmental Conservation Files.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D981184237

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Alsy Manufacturing was issued a Summary Abatement Order on April 9, 1985 by the NYSDEC Stony Brook office. The company was ordered to remove all liquid and sludge wastes from all manholes, catchbasins, and leaching cesspools, and to disconnect and remove all piping leading to them. The case was assigned to the State Attorney General for criminal prosecution on September 20, 1985. The criminal case was dismissed with prejudice in April 1987. Alsy Manufacturing was assessed a civil penalty which they agreed to pay. All past violations have ceased, and the company currently discharges its wastewater under permit into the Nassau County Sewer System.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, report)

New York State Department of Environmental Conservation Files.

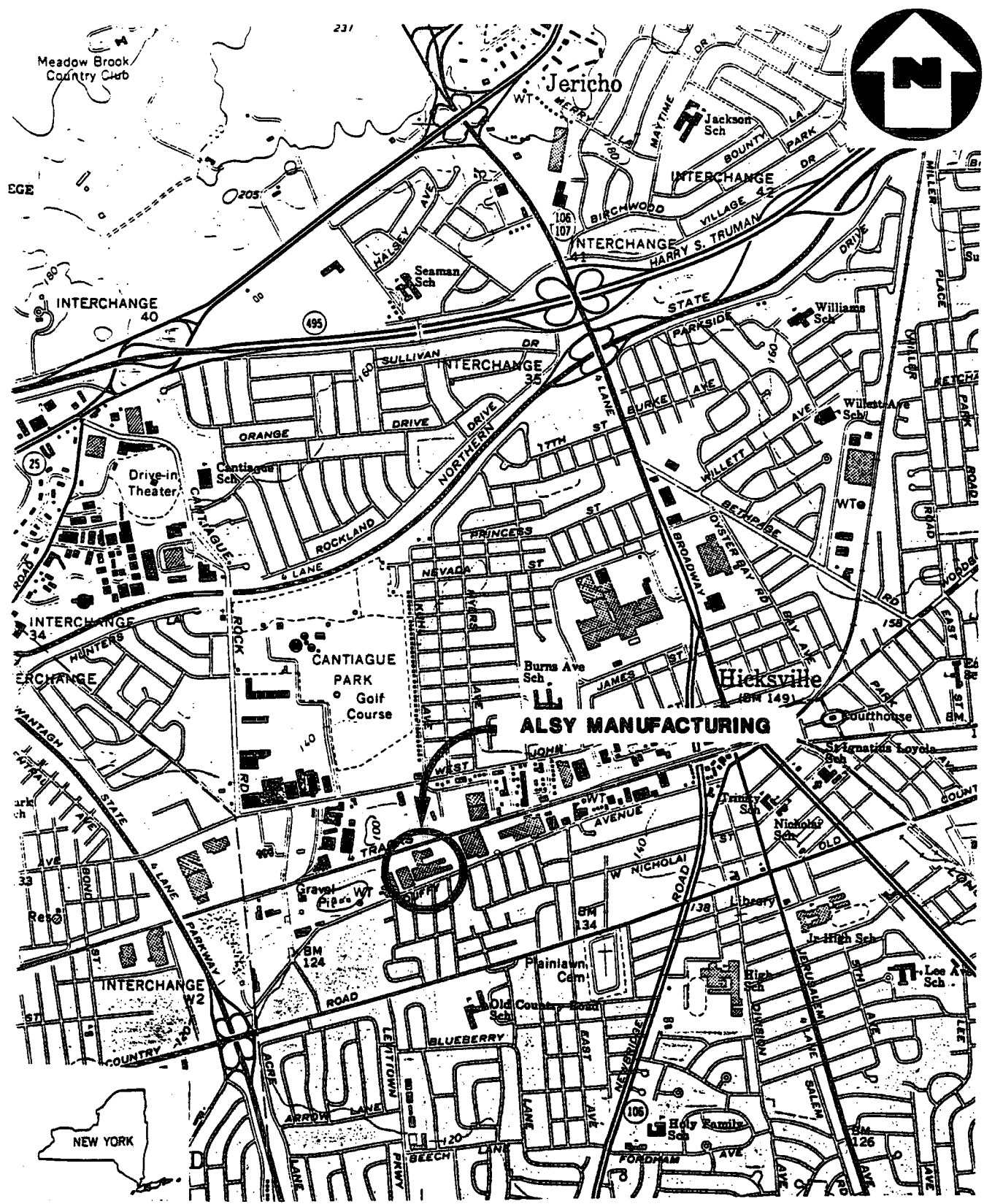
SECTION 3

MAPS AND PHOTOGRAPHS

ALSY MANUFACTURING
HICKSVILLE, NEW YORK

CONTENTS

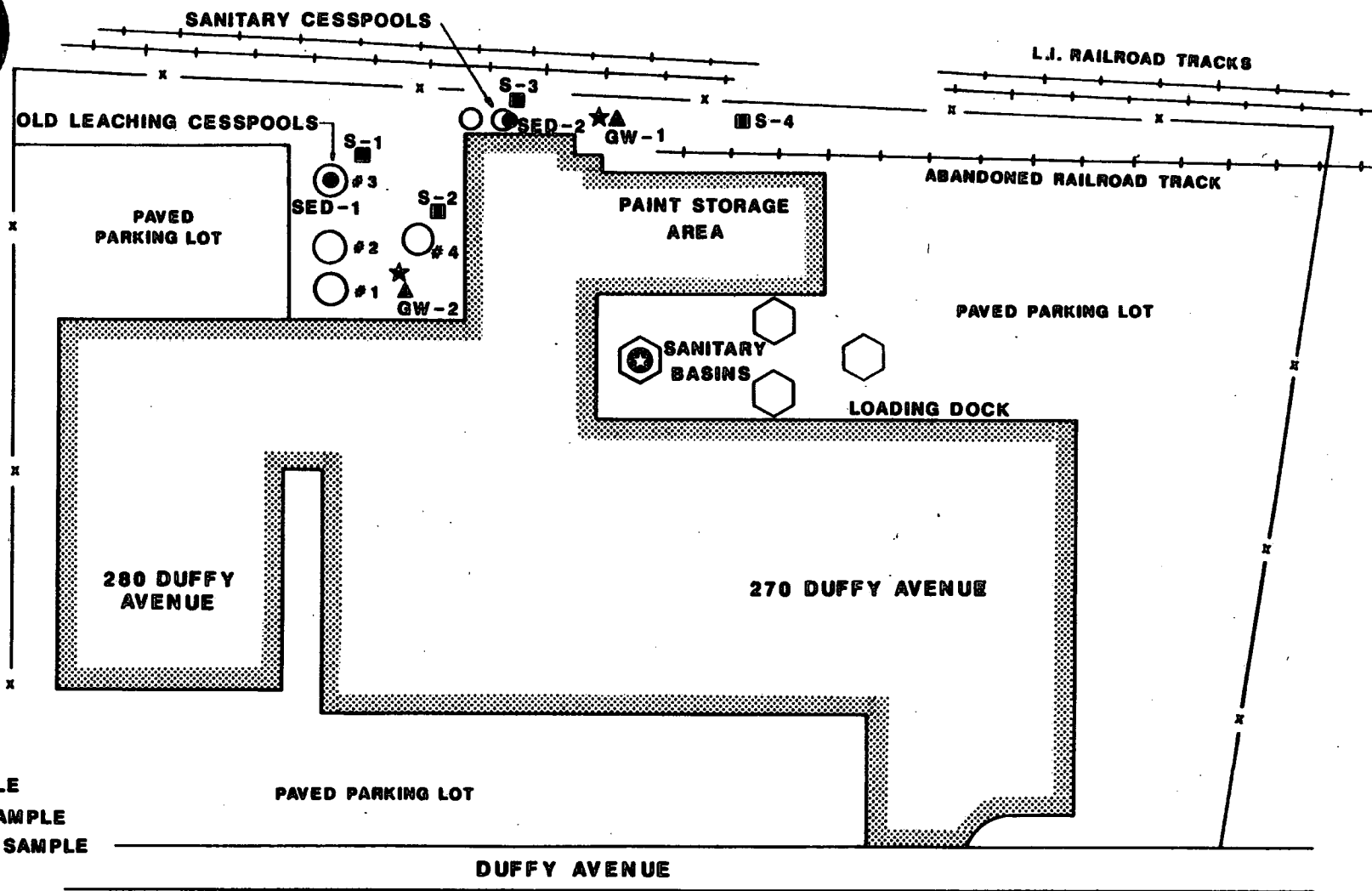
- Figure 1: Site Location Map
- Figure 2: Site Map
- Figure 3: Sample Location Map
- Exhibit A: Photograph Log



(QUAD) HICKSVILLE

SITE LOCATION MAP
ALSY MANUFACTURING, HICKSVILLE, N.Y.

SCALE: 1" = 2000'



LEGEND :

- ★ WELL
- SOIL SAMPLE
- SEDIMENT SAMPLE
- ▲ GROUNDWATER SAMPLE
- ⊛ SURFACE WATER SAMPLE

***NOTE:**

**ALL SAMPLE NUMBERS
PRECEDED BY NYT7**

SAMPLE LOCATION MAP

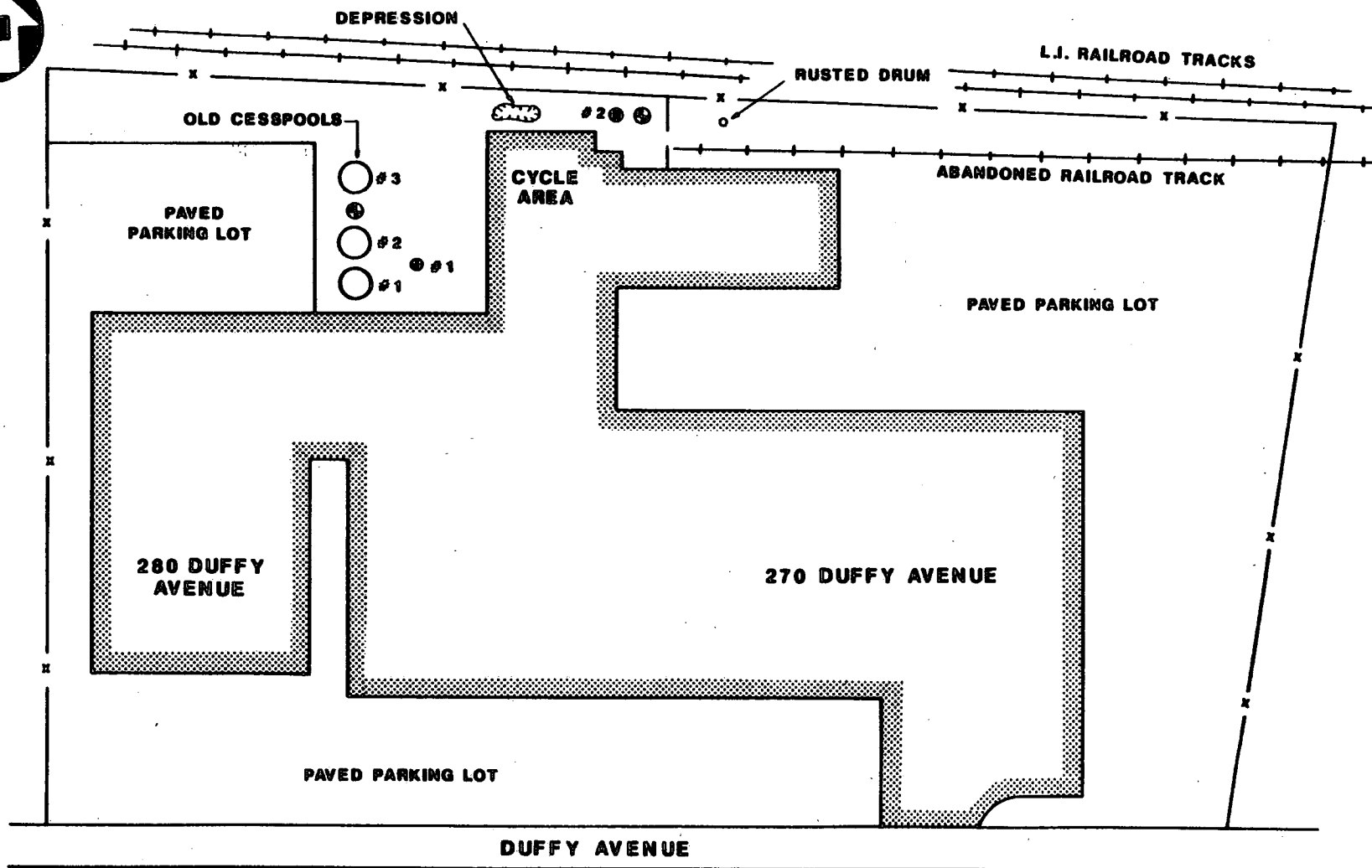
ALSY MANUFACTURING, HICKSVILLE, N.Y.

(NOT TO SCALE)

FIGURE 3



02-8705-10-SR
Rev. No. 0



LEGEND

● DEC WELL

⊕ WELL

SITE MAP

ALSY MANUFACTURING, HICKSVILLE, N.Y.

(NOT TO SCALE)

FIGURE 2



02-8705-10-SR
Rev. 0

EXHIBIT A

PHOTOGRAPH LOG

ALSY MANUFACTURING
HICKSVILLE, NEW YORK
TDD NO. 02-8705-10
JUNE 16, 1987

ALSY MANUFACTURING
HICKSVILLE, NEW YORK
TDD No 02-8705-10
JUNE 16, 1987

PHOTOGRAPH INDEX

ALL PHOTOS TAKEN BY JOHN DUCAR.

<u>Photo Number</u>	<u>Description</u>	<u>Time</u>
1P-1	D. deBruijn and P. Morton taking GW-1.	1020
1P-2	D. deBruijn and P. Morton taking GW-2.	1225
1P-3	D. deBruijn and P. Morton taking SW-1 from sanitary basin.	1320
1P-4	D. deBruijn taking S-1 near leaching cesspool No. 3	1500
1P-5	P. Morton taking SED-1 from leaching cesspool No. 3.	1515
1P-6	D. deBruijn taking S-2 near leaching cesspool No. 4.	1525
1P-7	D. deBruijn taking S-3 near sanitary cesspool.	1600
1P-8	D. deBruijn taking S-4 near railroad spur.	1610
1P-9	P. Morton taking SED-2 from sanitary cesspool.	1630

ALSY MANUFACTURING, HICKSVILLE, NEW YORK



1P-1 June 16, 1987
D. deBruijn and P. Morton taking GW-1.
Photographer: John Ducar.

1020



1P-2 June 16, 1987
D. deBruijn and P. Morton taking GW-2.
Photographer: John Ducar.

1225

ALSY MANUFACTURING, HICKSVILLE, NEW YORK



1P-3

June 16, 1987

1320

D. deBruijn and P. Morton taking SW-1 from sanitary basin.
Photographer: John Ducar.



1P-4

June 16, 1987

1500

D. deBruijn taking S-1 near leaching cesspool #3.
Photographer: John Ducar.

ALSY MANUFACTURING, HICKSVILLE, NEW YORK



1P-5 June 16, 1987 1515
P. Morton taking SED-1 from leaching cesspool #3.
Photographer: John Ducar.



1P-6 June 16, 1987 1525
D. deBruijn taking S-2 near leaching cesspool #4.
Photographer: John Ducar.

ALSY MANUFACTURING, HICKSVILLE, NEW YORK



1P-7 June 16, 1987 1600
D. deBruijn taking S-3 near sanitary cesspool.
Photographer: John Ducar.



1P-8 June 16, 1987 1610
D. deBruijn taking S-4 near railroad spur.
Photographer: John Ducar.



NUS
CORPORATION

02-8705-10-SR
Rev. No. 0

ALSY MANUFACTURING, HICKSVILLE, NEW YORK



1P-9

June 16, 1987

1630

P. Morton taking SED-2 from sanitary cesspool.
Photographer: John Ducar.

SECTION 4

BIBLIOGRAPHY OF INFORMATION SOURCES

BIBLIOGRAPHY OF INFORMATION SOURCES

SOURCE	LOCATION
1. NUS Corporation, Region 2 FIT site inspection conducted on June 16, 1987, TDG No. 02-8705-10.	NUS Corporation Edison, New Jersey
2. Franke, O.L., and N.E. McClymonds. Summary of the hydrologic situation on Long Island, New York, as a guide to waste-management alternatives. 1975.	NUS Corporation Edison, New Jersey
3. Henry, K.U. and D.J. Sulam, Hydrologic and water-quality appraisal of southeast Nassau County, Long Island, New York, 1979.	NUS Corporation Edison, New Jersey
4. Dispersal of plating wastes and sewage contaminants in groundwater and surface water, South Farmingdale - Massapequa area, Nassau County, New York, U.S. Geological Survey, 1970.	NUS Corporation Edison, New Jersey
5. The changing pattern of groundwater development on Long Island, New York, Geological Survey, 1965.	NUS Corporation Edison, New Jersey
6. Uncontrolled hazardous waste site ranking system, A user's manual, 40 CFR, Part 300, Appendix 1, 1986.	NUS Corporation Edison, New Jersey
7. Soil Survey of Nassau County, New York, U.S. Department of Agriculture. 1987.	NUS Corporation Edison, New Jersey.
8. NYSDEC file on Alsy Manufacturing.	NUS Corporation Edison, New Jersey
9. Community Water Supplies and Monitoring Wells within a 3-mile radius of the site. Supplied by Nassau County Department of Health.	NUS Corporation Edison, New Jersey
10. U.S. Dept. of the Interior, Geological Survey Topographic Map "Hicksville Quadrangle, New York," 1967, revised 1979.	NUS Corporation Edison, New Jersey
11. Alsy Manufacturing Waste Manifests and Nassau County. Sewer permit	NUS Corporation Edison, New Jersey
12. Telecons between B. O'Brien, NYSDEC, Stonybrook Office, and J. Ducar, NUS Corp., on 05/26/87 and 06/02/87.	NUS Corporation Edison, New Jersey

BIBLIOGRAPHY OF INFORMATION SOURCES

- | | | |
|-----|---|---------------------------------------|
| 13. | Telecon between, D. Myott of Nassau County Department of Health and J. Ducar of NUS Corp., 12/1/87. | NUS Corporation
Edison, New Jersey |
| 14. | General Sciences Corporation "Draft Graphical Exposure System (GEMS)" U. S. EPA, 1987. | NUS Corporation
Edison, New Jersey |
| 15. | Investigation Report by Nassau County Fire Commission Office of Fire Marshal. | NUS Corporation
Edison, New Jersey |
| 16. | U.S. Dept. of Interior National Register for National Natural Landmarks for New York, 1987. | NUS Corporation
Edison, New Jersey |
| 17. | U.S. EPA Contract Laboratory Program, York Laboratories, Case No. 7459, Organic Laboratory Analysis from NUS Region 2 FIT Site Inspection conducted June 16, 1987. | NUS Corporation
Edison, New Jersey |
| 18. | U.S. EPA Contract Laboratory Program, Spectrix Corporation, Case No. 7459, Inorganic Laboratory Analysis from NUS Region 2 FIT Site Inspection conducted June 16, 1987. | NUS Corporation
Edison, New Jersey |

SECTION 5

PRESS RELEASE SUMMARY

SUMMARY STATEMENT

Alsy Manufacturing in Hicksville, Nassau County, N.Y. has been an active producer of lamps and lamp shades since 1975. The site covers 2.3 acres and the property is owned by Surrey Corp. Previous owners include Metalab Equipment Corp., which produced heavy machinery in the early 1950s until a date which is unknown.

The site is located in a densely populated industrial/residential area of Long Island, New York. It is bordered to the north by the Long Island Railroad, to the south by Duffy Avenue and residential homes, and to the east and west by other companies. Population within a 1-mile radius of the site is 13,611.

Metal plating, finishing, and painting processes generate a variety of wastes, consisting mainly of solvents and heavy metals. The site has been under investigation by the New York State Department of Environmental Conservation (NYSDEC) and the Nassau County Department of Health since 1984. The plant has had a history of poor housekeeping and had been cited for violating its State Pollutant Discharge Elimination System (SPDES) permit on several occasions.

Alsy previously discharged its wastewater into leaching cesspools located in the rear of the building. The waste would percolate freely through the very permeable, unsaturated soil to the water table. The area near the cesspools was known to have flooded from overflowed wastewater on several occasions. Also, observations of stained pavement near the drum storage area indicated that the drums of waste paint and paint sludge stored outside the building in an alley were leaking.

The entire population within a 3-mile radius of the site uses groundwater as its sole source for drinking water. There is no surface water use within a 3-mile radius of the site.

On June 16, 1987, a site inspection was conducted on Alsy Manufacturing's property which included collection of two groundwater samples, one sewer sample, and six soil samples.

The groundwater samples analyzed revealed the presence of 1, 1, 1-trichloroethane, along with a number of heavy metals in concentrations above the Federal Drinking Water standards.

Soil sample analysis showed the presence of a number of organics and inorganics, including cyanide, PCBs, and pesticides.

SECTION 6

BACKGROUND INFORMATION

REFERENCE #1

0030-F
02-8705-10

NUS CORPORATION

II

0082



New York State
Department of
Environmental Conservation



RICHARD G. TORREY
~~Engineering Technician~~
Bureau of Remedial Action
Division of Solid and Hazardous Waste

50 Wolf Road
Albany, NY 12233-0001

(518) 457-5637

Alsy Manufacturing
TDD # 02-8705-10
Project Manager: J. Ducar
Logbook # 0082
June 4, 1987

REFERENCE #2

Werbin
AKA
Trube

Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water-Management Alternatives

By O. L. FRANKE and N. E. McClymonds

HYDROLOGY AND SOME EFFECTS OF URBANIZATION ON
LONG ISLAND, NEW YORK

GEOLOGICAL SURVEY PROFESSIONAL PAPER 627-F

*Prepared in cooperation with the New York
State Department of Conservation, Division
of Water Resources; the Nassau County
Department of Public Works; the Suffolk
County Board of Supervisors; and the
Suffolk County Water Authority*



UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1972

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, *Secretary*

GEOLOGICAL SURVEY

H. William Menard, *Director*

Library of Congress catalog-card No. 71-180655

First printing 1972
Second printing 1979

For sale by the Branch of Distribution, U.S. Geological Survey,
1200 South Eads Street, Arlington, VA 22202

REFERENCE #3

**LONG ISLAND WATER RESOURCES
BULLETIN 13**

**HYDROLOGIC AND WATER-QUALITY APPRAISAL OF
SOUTHEAST NASSAU COUNTY,
LONG ISLAND, NEW YORK**

**By
Henry F. H. Ku and Dennis J. Sulam**

**U.S. Department of the Interior
Geological Survey**

**Prepared by the
U.S. GEOLOGICAL SURVEY**

**in cooperation with the
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS**

**Published by
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS**

1979

Precip

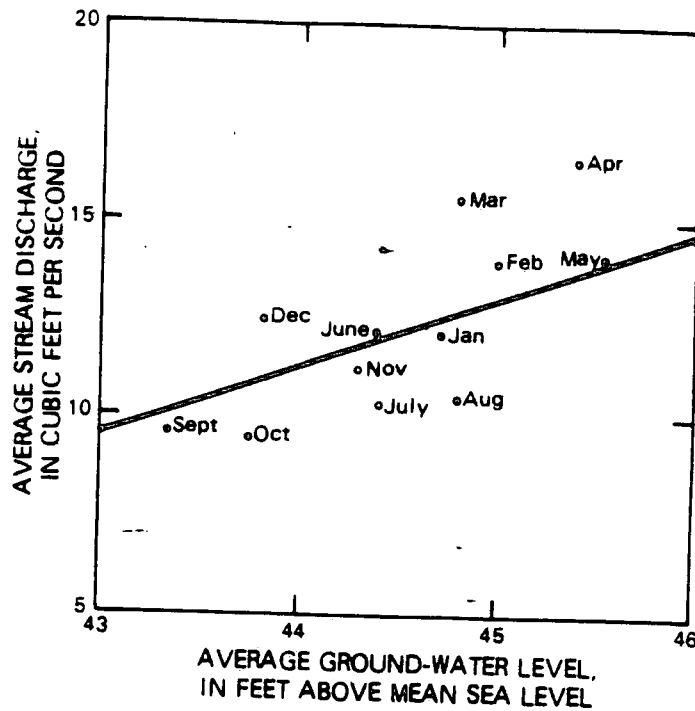


Figure 5.--Relation of discharge of selected streams in Sewer District 3 to water levels in nearby wells. (Data points represent monthly average during 1951-75.)

Precipitation

Precipitation is the sole source of natural fresh-water recharge on Long Island. During the winter, most precipitation on Long Island is caused by low-pressure systems that originate in the Gulf of Mexico and in the southwest part of the North Atlantic Ocean and move northeastward along the Atlantic Coast. During the summer, most precipitation is associated with thunderstorms, either local or initiated by the passage of cold fronts. A detailed study of the precipitation regime of Long Island is given in Miller and Frederick (1969).

The long-term average (1947 to 1975) annual precipitation at Freeport, Nassau County, is 40.93 in. (fig. 6). However, the amount of precipitation varies considerably from year to year. For example, annual precipitation since 1947 ranged from 24.56 in. in 1965 to 51.58 in. in 1975. A bar graph of annual precipitation at the Freeport gauge is shown in figure 6.

Figure 7 shows the long-term annual precipitation distribution in the study area, as described by Miller and Frederick (1969). This map

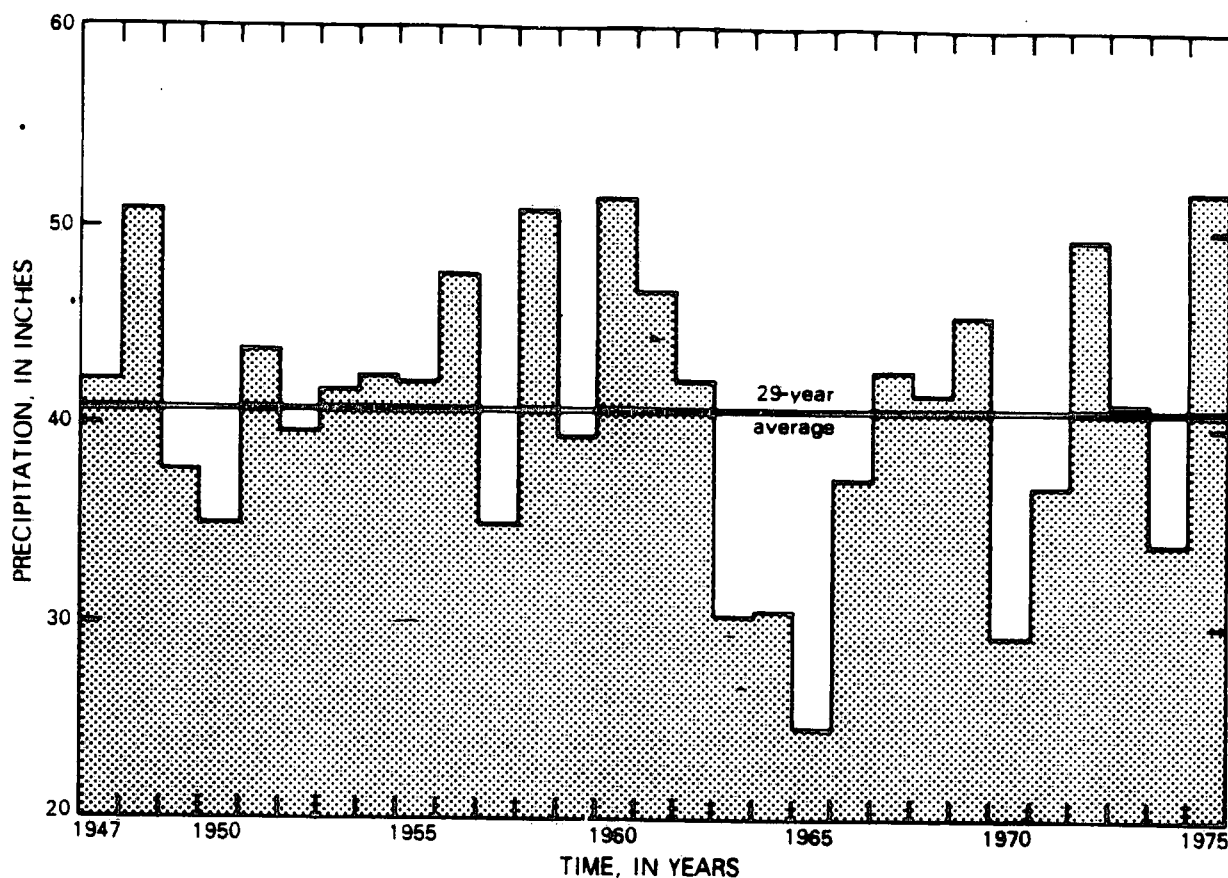


Figure 6.--Annual precipitation at Freeport, 1947-75.

represents a 15-year period of record, which is of sufficient length to provide precipitation averages that compare favorably with the average for the climatologic normal period of 30 years, in accordance with the standards of the World Meteorological Organization.

Twelve rain gages were operated in and around the study area during 1974-77 to determine the areal distribution of local precipitation. The data were used to prepare maps showing precipitation patterns during a cool season (October 1975 to March 1976), a warm season (April 1976 to September 1976), and a water year (October 1975 to September 1976). (See figs. 8A-8C, p. 14-16.) The report by Miller and Frederick (1969) was used as a guide in drawing the lines of equal precipitation.

Precipitation during water year 1976 was nearly equivalent to the average long-term precipitation measured at the Freeport gage, and the areal distribution was similar to the long-term pattern, as determined by Miller and Frederick (1969), except that a large amount was recorded at the Bellmore gage from April to September.

In general, precipitation increases from the south shore to the higher elevations at the center of Long Island.

GROUND WATER

Water-Level Changes

A network of shallow observation wells has been installed and maintained throughout Nassau County by the Nassau County Department of Public Works, Division of Sanitation and Water Supply, to monitor ground-water levels. These wells were used extensively during this study.

Ten well lines (locations shown in fig. 9), each consisting of four or five wells, were used to define water-table fluctuations in the study area. Hydrographs of these well lines are shown in figure 10. Well lines 1, 3, 5, 7, and 9 represent wells in which water-table altitudes were 50 feet or more above mean sea level; well lines 2, 4, 6, 8, and 10 represent wells in which water levels were less than 50 ft above mean sea level. The latter wells are near the south-shore bays and therefore fluctuate less than others in response to stress placed on water-levels because the bays act as a constant head boundary.

Between 1950 and 1962, average water levels in all wells in each well line were generally near or above the long-term average. However, from 1963 to 1967, water levels declined steadily. Most of the water-level declines resulted from below-average precipitation during the 1962-66 drought on Long Island (Cohen and others, 1969). After 1967, water levels began to recover and by 1975 were virtually at predrought levels.

Effects of sewerage on ground-water levels in Sewer District 2, directly west of the study area, were analyzed by Garber and Sulam (1976). Their study indicates that after the installation of sewers in 1953, water levels in Sewer District 2 declined in relation to water levels in Sewer District 3 and that declines in Sewer District 2 ranged from 5.1 ft to 23.7 ft at individual well-line locations (Garber and Sulam, 1976). Most of the water-level decline in Sewer District 2 was attributed to sewerage and ground-water withdrawals in adjacent Queens County. Because hydrogeologic conditions in both sewer districts are similar, water-level declines are also expected in Sewer District 3 after completion of hookups to the regional sewerage system.

Ku and others (1977), with the aid of an analog model, predicted that sewerage in Sewer District 3 would cause water-table declines and that the maximum decline would be directly south of the present ground-water divide (fig. 11). By 1995, after 20 years of sewer operation, this decline should cause the ground-water divide to shift northward. If the divide moves as expected, water in the area between the two locations will no longer flow north from the location of the present divide but will be reversed and flow south from the new divide.

The maximum decline from sewerage in the study area is predicted by analog-model simulation to be little more than 16 ft and to be concentrated in a small area directly south of the present ground-water divide. This applies both to the upper glacial and the Magothy aquifers. The predicted net decline of 16 ft agrees with measurements made by Franke (1968) and Garber and Sulam (1976) in Sewer District 2, west of the study area.

Public-Supply Wells

Pumpage

Pumpage from public-supply wells in Nassau County during 1975 was 170 Mgal/d; total pumpage that year in Sewer District 3 was approximately 53 Mgal/d. Table 6 summarizes pumpage in the water districts of Sewer District 3 by aquifer; figure 23 shows the distribution of public-supply pumpage in Sewer District 3 during 1975.

The increase in pumpage from public-supply wells by water districts in Sewer District 3 during 1950-76 is summarized in table 7. The pattern of the increases in ground-water withdrawals is illustrated by pumpage totals of

Table 6.--Summary of pumpage by aquifer from public-supply wells in Sewer District 3, Nassau County, 1975

[Locations of water districts are shown in figure 23]

Water District	Population	Pumpage (in thousands of gallons)			
		Upper glacial	Magothy	Lloyd	Total
New York Water Service	171,080	0	4,495,808	0	4,495,808
Massapequa	51,000	0	1,598,496	0	1,598,496
Farmingdale	9,925	0	347,644	0	347,644
South Farmingdale	55,000	152,603	1,159,589	0	1,312,192
East Meadow	50,000	0	1,694,502	0	1,694,502
Levittown	50,000	0	1,330,975	0	1,330,975
Bethpage	32,950	0	1,033,280	0	1,033,280
Hicksville	60,000	0	2,022,257	0	2,022,257
Plainview	46,000	0	1,553,144	0	1,553,144
Jericho	58,100	0	2,754,043	0	2,754,043
Westbury	18,000	0	758,172	93,345	851,517
Carle Place	10,000	0	438,283	0	438,283
TOTAL					19,432,141 (53.2 Mgal/d)

New York Water Service (fig. 23), which is the largest supplier in the study area. Between 1950 and 1960, pumpage increased by 5.93 Mgal/d; pumpage between 1960 and 1970 increased by 3.86 Mgal/d; but pumpage since 1970 has increased by only 1.12 Mgal/d. Throughout Sewer District 3, pumpage increased from 10 Mgal/d in 1950 to 53 Mgal/d in 1975, about a fivefold increase.

In 1975, water use ranged from 0.21 (Mgal/d)/mi² in the Jericho Water District to 0.91 (Mgal/d)/mi² in the Carle Place Water District. Average water use among the districts was 0.5 (Mgal/d)/mi². When sewer installations are completed, most of the water use will be consumptive because approximately 85 percent of the pumped water will be routed to sewer lines. The rest will be used for lawn sprinkling and other outdoor use, and part of it will infiltrate back to the water table. By 1985, water use in Sewer District 3 is expected to range from 0.21 (Mgal/d)/mi² in the Jericho Water District to 1.69 (Mgal/d)/mi² in the Westbury Water District. These estimates are derived from pumpage figures given in Kimmel and others (1977). Average water use by 1985 is expected to be 0.94 (Mgal/d)/mi².

Water Loss

Greeley and Hansen (1971, p. 84) estimated water loss (including sewage disposal, evapotranspiration from sprinkling, and consumptive losses) in each water district for 1990. If specific yield of 20 percent is assumed for the water-table aquifer in Sewer District 3, the average water-level decline in response to the estimated hydrologic losses would range from 3.1 ft to 17 ft. Water-level declines in response to losses from storage are predicted to be slightly greater than the 3-ft to 16-ft decline predicted by the analog-model studies of Ku and others (1977), which take into account subsurface outflow from district to district, streamflow decreases, and lower population predictions.

Water Quality

The quality of the public-water supply of Nassau County is monitored by the Nassau County Department of Health, as well as by the various water suppliers. Records for 11 public-supply wells in the area having extensive water-quality data and suitable areal distribution were used to compute the trend of nitrate, chloride, and total solids with time. Trend lines were fitted through data points by the least-square method of analysis. Figure 24 shows that concentrations of nitrate (as N), chloride, and total solids increased from the 1950's to 1973 at the 11 selected wells. Smith and Baier (1969) state that water from 24 percent of the public-supply wells in Nassau County had increasing nitrate trends in 1969 and that the nitrate (as N) concentration of water from 16 percent of the public-supply well will exceed the drinking-water limit of 10 mg/L within 50 years. Effluent from cesspools is cited as the primary source of nitrate in the Nassau County Water Supply.

Sections showing vertical distribution of nitrate, chloride, and total-solids concentrations indicate that these constituents have moved downward into the aquifers in a range from tens of feet to a few hundred feet from the 1950's to 1976 (Ku and Sulam, 1976).

Perlmutter and Koch (1972) have shown that most Magothy aquifer wells whose water has a significantly increasing nitrate concentration lie in a central band running east-west across Nassau County. This is because under natural conditions the vertical (downward) movement of water in the vicinity of the major ground-water divide is more rapid than in other parts of the study area. As a result, elevated concentrations of nitrate and other constituents of ground water tend to lie at greater depths near the divide than elsewhere.

The rate of vertical movement of water near the ground-water divide is estimated to be 5 to 25 ft per year and to average 10 ft per year (Perlmutter and Koch, 1972). At this rate, water would move 500 ft from the water table to the base of the Magothy aquifer in about 50 years. Using a steady-state electric-analog model, Franke and Cohen (1972) estimated that it would take 100 years for water to move from the water table to the base of the Magothy aquifer (500 ft) along the Nassau-Suffolk County boundary at the ground-water divide. However, the rates of vertical movement would be accelerated by pumping.

In areas of Hicksville and Levittown, large-scale farming and associated use of fertilizers since 1920 (Perlmutter and Koch, 1972) has undoubtedly contributed nitrate to the ground-water system. More recently, fertilizers applied to lawns and gardens have become sources of nitrate in ground water.

The lowest concentrations of nitrate, chloride, and total solids in the Magothy aquifer are south of a line running from North Merrick to South Farmingdale (fig. 1).

Median nitrate (as N) concentrations of untreated water from all public-supply wells in the water districts and villages in Sewer District 3 ranged from 0.02 mg/L to 4.0 mg/L (table 8). The pH of untreated public-supply water ranged from 5.1 to 6.7. Specific conductance ranged from 35 to 120 μ mho/cm, which indicates that the water has a low mineral content.

Iron and manganese enter ground water as a result of bacterial action or the solvent action of water on minerals or manmade products containing these elements. Iron is ubiquitous in ground water on Long Island. However, manganese in ground water is usually attributed to bacterial action at shallow depths. Manganese was virtually absent in public-supply wells in Sewer District 3 (table 8), whereas iron concentrations ranged from 0 to 0.49 mg/L. Pluhowski and Kantrowitz (1964) found that iron in excess of 0.3 mg/L with an absence of manganese can occur in all aquifers underlying Long Island and is probably the result of the solution of iron-bearing minerals or iron oxide within the aquifer.

Median hardness of water (as CaCO_3) differs greatly from well to well and ranged from 6 to 32 mg/L during the 3-year study. In water districts where hardness (as CaCO_3) was less than 10 mg/L, ion exchange resulting from water percolating through clay lenses in the aquifer was the most likely contributing factor (Pluhowski and Kantrowitz, 1964, p. 56).

REFERENCE #4

Dispersal of Plating Wastes and Sewage Contaminants in Ground Water and Surface Water South Farmingdale-Massapequa Area, Nassau County, New York

M. PERLMUTTER and MAXIM LIEBER

CONTRIBUTIONS TO THE HYDROLOGY OF THE UNITED STATES

HYDROLOGICAL SURVEY WATER-SUPPLY PAPER 1579

*Prepared in cooperation with the
Nassau County Department of Public
Works and the Nassau County
Department of Health*



in Massapequa Creek decreased from about 3 mg/l of chromium and 0.1 mg/l of cadmium at the headwaters of the stream to zero near the mouth.

No public-supply wells have been contaminated by metal-plating wastes, and none are in the predicted path of the plume except for a part of New York City's supplementary ground-water system, composed of wells and infiltration galleries, about 2.5 miles downgradient from the plume. This system which operated infrequently (mostly during drought periods) is in no immediate danger of contamination by plating wastes owing to the slow rate of movement and dilution of the contaminated water.

Although the physical and hydraulic properties of the water-bearing deposits do not completely satisfy the basic assumptions of classical dispersion concepts and formulas, comparison of field observations of the spread of the heavy metal with theoretical estimates was useful in evaluating the role of various dispersion mechanisms. The data suggest that the natural velocity and direction of the ground-water movement account for most of the longitudinal spread, and the pattern and rate of injection of the plating wastes and the heterogeneity of the deposits account for most of the lateral spread of the contaminants. The vertical extent of the contaminants is controlled chiefly by the head relations at the near the disposal basins, the vertical permeability of the beds, and the nature of the regional flow pattern.

The detergent constituent alkybenzenesulfonate, referred to as MBAS (methylene blue active substance) in this report, also was investigated. MBAS may cause foaming of water locally, but it is not toxic at the low concentrations determined in the report area. Concentrations of MBAS were greatest in the upper 20 feet of the upper glacial aquifer, where they ranged from less than 0.1 to about 5 mg/l at most test wells. Traces of MBAS were found as deep as 10 feet below the water table near the bottom of the upper glacial aquifer, but no evidence was found of widespread downward seepage of this contaminant into the underlying Magothy aquifer. Concentrations of MBAS in Massapequa Creek ranged from a few tenths of 1 mg/l to as high as 1.7 mg/l.

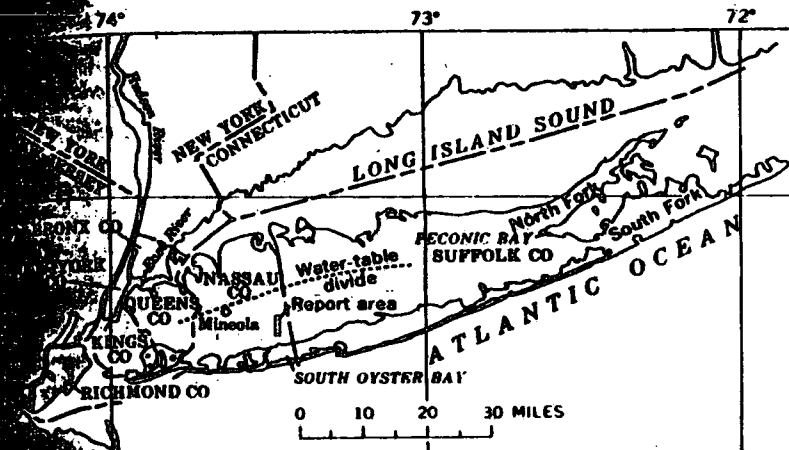
Public sewers now under construction 1968 in southeastern Nassau County will help reduce contamination of the upper glacial aquifer, but some contaminants such as nitrate, MBAS, and heavy metals probably will remain in the water for many years after sewerage is completed.

INTRODUCTION

PURPOSE AND SCOPE OF INVESTIGATION

Ground water, derived from precipitation on Long Island, is the sole source of supply for nearly 1.5 million people and several thousand commercial establishments and light industries in Nassau County (fig. 1). In 1966, pumpage for all uses averaged about 215 mgd (million gallons per day).

Since the 1940's, construction of numerous one-family homes and some light industrial plants in parts of Nassau County have resulted in increasing contamination of the upper part of the ground-water reservoir, both by seepage of effluent from cesspools and septic-tank



Location of the area in Nassau County investigated for plating-waste and detergent contamination.

and by industrial wastes discharged accidentally or intentionally into the ground water.

Although the southwestern part of the county was largely sewered in 1964, residual contamination in the shallow ground water in the sewered area and continued contamination of the ground water in the unserved northern and eastern parts of the county constitute a significant limitation on the use of a major shallow aquifer as a source of water for public supply. As a result of actual or potential contamination, most public-supply wells tapping this shallow aquifer have been abandoned, or withdrawals from them have been substantially reduced. Furthermore, this contamination, if unchecked, may represent a long-term threat to the future availability of water of suitable quality from an underlying major artesian water-bearing unit, the Magothy aquifer, that is in hydraulic continuity with the shallow aquifer. The Magothy aquifer is the chief source of water for public supply in Nassau County.

This report is based chiefly on the results of the latest of a series of special investigations, begun in 1949, of contamination of shallow ground water in southeastern Nassau County. Most of the new data presented in this report were collected between 1962 and 1964, and a few additional samples were collected from 1965 to 1968. The two principal heavy-metal contaminants investigated were cadmium and hexavalent chromium contained in metal-plating waste fluids which seeped down to the ground water from a cluster of disposal basins. Contamination from detergent residues that have seeped down to the

CONTRIBUTIONS TO THE HYDROLOGY OF THE UNITED STATES
 Geological Survey; former Commissioner E. F. Gibbons, Nassau County Department of Public Works; and Commissioner J. H. Kinnaman, Nassau County Department of Health. The report was completed under the supervision of G. G. Parker, former district chief, New York District, and B. L. Foxworthy, former hydrologist-in-charge, Mineola, Long Island, N.Y.

HYDROLOGIC SYSTEM

An understanding of those elements of the hydrologic system that control the occurrence, movement, and chemical quality of the water is essential to an appraisal of water-contamination problems in the area. The part of the hydrologic system that is of principal concern in this investigation is the ground-water reservoir, which is the source of all the fresh water used in Nassau County. The ground-water reservoir in the South Farmingdale area consists of about 1,300 feet of saturated unconsolidated deposits resting on crystalline bedrock (Suter and others, 1949, pl. 8); however, intensive study of hydrologic conditions was confined chiefly to the upper 100 feet of the reservoir, which is most susceptible to contamination.

Figure 2 is a schematic representation of the upper part of the

EXPLANATION

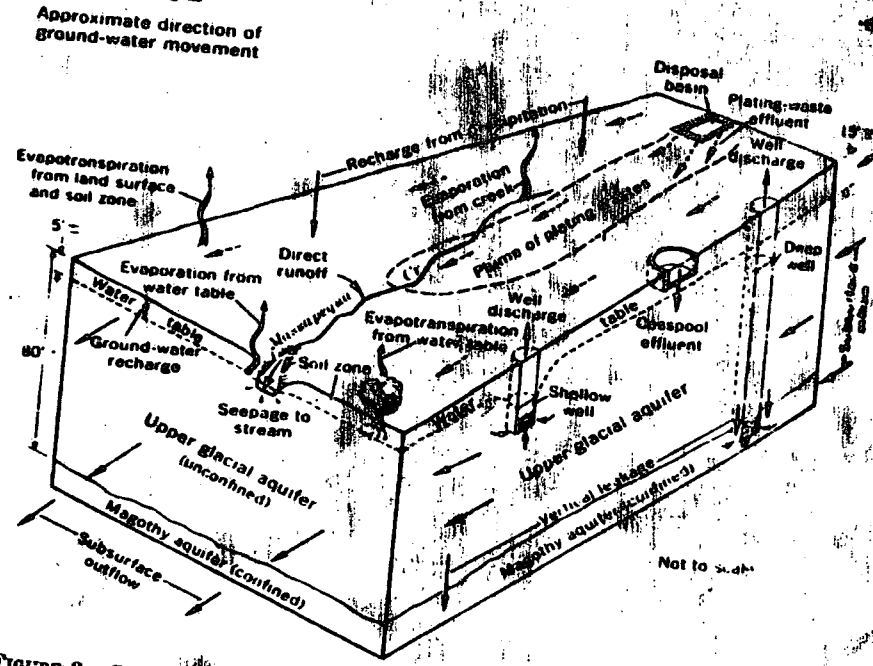


FIGURE 2.—The hydrologic system in the South Farmingdale-Massapequa area.

CONTAMINANTS, SOUTH FARMINGDALE-MASSAPEQUA, N.Y.

The water reservoir and of the other pertinent elements of the hydrologic system in the report area. The upper part of the reservoir consists of two major hydrogeologic units: (1) The upper glacial aquifer, which corresponds with the geologic unit known as the Pleistocene deposits, and (2) the Magothy aquifer, which is the Magothy Formation and younger undifferentiated formations of Late Cretaceous age (Perlmutter and Todd, 1965). Water enters the ground-water reservoir by direct infiltration of precipitation, by lateral subsurface inflow, and by artificial recharge at the top of the zone of saturation in the unconfined upper glacial aquifer called the water table (fig. 2). The underlying Magothy aquifer contains water under artesian pressure, and the heads in that aquifer range from slightly lower than the water table at the northern end of the overall report area, to slightly higher at the southern end. Consequently, under natural conditions the upper glacial aquifer locally loses water to and gains some water from the Magothy aquifer. The quantity of water interchanged naturally between the aquifers in the report area is presently small. Ground water is discharged from the aquifer by seepage to Massapequa Creek, by subsurface outflow, by evapotranspiration, and by loss of part of the water pumped from wells due to consumptive use.

As water moves through the report area, its dissolved solids content increases mainly because of contributions from plating wastes and household sewage. Airborne contaminants dissolved in precipitation that falls on the area, fertilizer chemicals carried down to the water table by the infiltrating water, and solution of some mineral matter from the aquifer materials also contribute some dissolved substances to the ground water.

WATER-BEARING UNITS

The upper glacial aquifer extends from the water table, at depths of about 0 to 15 feet below land surface, to the top of the Magothy aquifer, at depths of about 80 to 140 feet below land surface (fig. 2 and pl. 2). This aquifer consists chiefly of beds and lenses of fine to coarse sand and gravel. In some parts of the aquifer, thin lenses and beds of fine to medium sand, and less commonly of silt, are interbedded with the coarser beds, particularly in the lower part of the unit.

Table 1 compares the physical properties of representative samples of the water-bearing units, South Farmingdale area. Curves of particle-size analyses of the two most common lithologic types are shown in figure 3. These curves show that the texture of the samples from the 42-foot depth ranges from fine sand to medium gravel and contains

in the upper glacial aquifer consist chiefly of quartz grains; about 10 to 20 percent miscellaneous minerals, including biotite, chlorite, hornblende, and limonite grains of granite, schist, gneiss, and other rocks. Gravel-size materials are composed of quartz and various igneous and metamorphic rocks.

Records of a few scattered borings (wells 77B and 80, pl. 2) suggest that in places a greenish-gray silty and sandy clay about 8 to 10 feet thick intervenes between the lower part of the upper glacial aquifer and the underlying Magothy aquifer. This clay seems to underlie part of the valley of Massapequa Creek and probably extends at least as far north as the vicinity of Plitt Avenue (pl. 1D), but its continuity and lateral extent are unknown. The washed residue from a sample of the clay collected at a depth of 75 feet below the land surface at well 77B consists chiefly of quartz, an abundance of brown and black biotite and chlorite, a trace of glauconite, some brown plant material, and a few foraminifera of Pleistocene age. The occurrence and character of this marine clay suggests that it may be a northerly extension of the "20-foot" clay (Perlmutter and Geraghty, 1963, p. 36-37 and fig. 7) or possibly of the Gardiners clay (Suter and others, 1949, p. 22-24 and pl. 21).

The top of the underlying Magothy aquifer [pl. 2] is an irregular ancient erosional surface, which is usually indicated by the occurrence of beds of gray fine sand and clay. The Magothy aquifer is about 700 feet thick in the report area and is underlain by a confining unit known as the Raritan clay. The grain size, sorting, and texture of the beds in the Magothy aquifer vary both vertically and horizontally. The predominant grain size is fine sand, but thin beds and lenses of silt and clay as well as mixtures of all three types are common. Beds of coarse sand and gravel are generally found in the lowermost part of the aquifer only. A cumulative curve of a grain-size analysis of a typical sample of fine-grained sediment from the Magothy aquifer near the contact with the overlying glacial deposits is shown in figure 3, and selected physical properties are given in table 1. The poor sorting of the sample is indicated by the high uniformity coefficient. Other parts of the Magothy aquifer beneath the report area are poorly to moderately well sorted.

The average coefficient of permeability of the Magothy aquifer in the horizontal direction is estimated to be 500 gpd per sq ft. The average permeability in the vertical direction is much lower, possibly less than 10 percent of that in the horizontal direction, owing to lenses and beds of silt and clay in the aquifer. Sandy beds of the Magothy aquifer consist almost entirely of quartz and have only a trace of

heavy minerals and muscovite (white mica); silty beds consist chiefly of quartz, muscovite, and a small percentage of heavy minerals; and clayey beds consist chiefly of kaolinite (a clay mineral) and muscovite. Particles and thin layers of lignite (low-grade, brownish-black coal) and marcasite (iron sulphide) are abundant in the deposits.

The cation-exchange capacities of one sand and one clay sample from the Magothy aquifer are given in table 2. The samples tested have relatively low ion-exchange capacity, although the clay sample has an ion-exchange capacity about 40 times greater than that of the sand. These results are not necessarily typical of the aquifer as a whole, owing to the small volume tested.

TABLE 2.—Cation-exchange capacity of the Magothy aquifer

Analyses by U.S. Geological Survey. WRC well number from New York State Water Resources Commission]

Well	Depth of sample below land surface (feet)	Description	Cation-exchange capacity (meq. per 100 g)
Field No. WRC No.			
----- N7543	119-120	Gray lignitic clay and silt.-----	8.5
----- N7545	93-97	Gray, fine to medium sand and trace of silt.	2

ROUTING OF WATER THROUGH THE UPPER GLACIAL AQUIFER

An understanding of the patterns, rates, and quantities of water moving in different parts of the hydrologic system is useful in evaluating the fate of contaminants entering the system. This section deals chiefly with the elements of the water balance in the unconfined upper glacial aquifer which contains the contaminated water described in later sections. The hydrologic system in the report area (pl. 1) is believed to be in approximate dynamic equilibrium—that is, over the long term, the ground-water reservoir in the report area is gaining and losing water in about equal quantities and shows no significant net change in the amount of water in storage.

INFLOW

Water enters the report area from both natural and artificial sources. The two natural sources that provide most of the recharge are precipitation and subsurface inflow (fig. 2). The ground water reservoir is recharged artificially, largely by infiltration of domestic and industrial liquid wastes from cesspools, seepage fields, and disposal basins.

Precipitation on the principal study area averages about 45 inches per year, which is equivalent to an average of about 2 mgd per sq mi

although concentrations greater than the recommended limit of 0.5 mg/l were restricted mainly to about the upper 20 feet of the aquifer.

The effect of detergents on plants was studied at the New York State University Agricultural and Technical Institute at Farmingdale, Long Island, by Bing and Bradley (1964), who showed that the application of water containing concentrations of the surfactant ABS as high as 200 mg/l to several types of flowering plants and radishes resulted in no visible adverse effects on their growth. The investigators concluded that the low concentrations of ABS normally found in ground water are probably not harmful to most plants, particularly those grown in well-fertilized soil.

Because of the wide distribution of MBAS and other sewage constituents in the upper glacial aquifer, it presently might not be desirable to construct shallow public-supply wells in the report area. Nearly all the wells supplying water for public use in the report area, however, tap deep zones in the Magothy aquifer which generally yields water of excellent quality.

The only shallow public-supply installations in the overall report area that showed significant MBAS contamination were New York City's infiltration gallery and well field at Massapequa (pl. 1). Samples of water from the Massapequa infiltration gallery, which taps the upper glacial aquifer, contained 0.9 to 1.7 mg/l of MBAS in 1965. The character of the ground water available for inflow into the gallery was indicated by the results of the analyses of samples of water pumped at different depths from a shallow well driven at Brooklyn Avenue and Parkside Boulevard, a short distance north of the gallery (table 9). Nearly all the water contained excessive concentrations of MBAS, and one sample, at a depth of 27 feet, had a nitrate concentration which was only a few milligrams per liter below the recommended limit of 45 mg/l for drinking water.

A sample of water from the Massapequa well field (table 5) contained about 0.04 mg/l of MBAS in 1965. The water probably represented a composite sample from wells tapping both the upper glacial

TABLE 9.—Chemical analyses of water from well N7960, Massapequa, N.Y.
(Analyses by the Nassau County Department of Health. Date sampled, October 1, 1965. Depth of sample, about 10 feet)

Depth of sample (feet)	Chloride (mg/l)	Nitrate as NO ₃ (mg/l)	MBAS (mg/l)
12.5	55	23	0.02
17.5	32	23	1.5
22.5	29	25	1.5
27.5	23	42	1.0
32.5	18	36	1.2

the Magothy aquifers. Presumably the MBAS content was largely not entirely from the upper glacial aquifer.

No evidence of detergent contamination was found in the water from the middle and lower zones of the Magothy aquifer in the report area. As noted previously (see "Chemical quality of the inflowing water"), however, one public supply well, N4042, screened in the upper part of the Magothy aquifer showed evidence of some MBAS contamination presumably of local origin.

The general lack of contamination in the Magothy aquifer in the report area was attributed to three factors: (1) The natural flow pattern of most of the contaminated water in the upper glacial aquifer was nearly horizontal, consequently, most of the contaminated water flows laterally through the upper glacial aquifer to areas of discharge such as streams and bays; (2) the heads in the Magothy aquifer at the southern end of the overall report area generally were slightly higher than the water table (Perlmutter and Geraghty, 1963, pl. 7), therefore little or no downward movement of MBAS from the upper glacial aquifer could occur except possibly in the immediate vicinity of heavily pumped wells; and (3) lenses of silt and clay in the Magothy aquifer have low permeabilities, but the lenses are not extensive enough to prevent some downward movement of MBAS and associated contaminants such as nitrate and chloride.

Long-term intensive pumping of the Magothy aquifer without some counter measures such as artificial recharge could result ultimately in the development of sizable and extensive declines of artesian pressures, which might ultimately induce downward leakage of significant quantities of contaminated water from the shallow aquifer. Such downward movement on a large scale, however, was not an imminent danger in the report area at the time of this investigation.

Slow deterioration of the chemical quality of the water in the upper glacial aquifer will continue until cesspools and similar waste-disposal systems have been eliminated by the construction and use of public sewers. Even after sewer construction, a period of many years may elapse before the major contaminants are substantially flushed out of the upper glacial aquifer by natural recharge, according to a preliminary study of ground water in the sewered area of southwestern Nassau County by the senior author (investigation in progress, 1969).

SUMMARY AND CONCLUSIONS

The uppermost aquifer in the South Farmingdale-Massapequa area consists chiefly of permeable deposits of sand and gravel having saturated thicknesses ranging from 60 to 140 feet. These deposits constitute the unconfined upper glacial aquifer, a major, but largely untapped,

water-bearing unit. Beneath the upper glacial aquifer are less permeable lenticular deposits of fine sand, silt, clay, and some gravel of Late Cretaceous age, having a total thickness of about 700 feet. These deposits contain water under confined, or artesian, conditions and comprise the Magothy aquifer, the principal water-bearing unit in the area.

Precipitation and subsurface inflow are the chief sources of natural recharge. Artificial recharge consisting of seepage from industrial disposal basins and domestic cesspools was the chief source of plating-waste and detergent contaminants in the ground water and in Massapequa Creek, whose flow is sustained mainly by seepage from the upper glacial aquifer. Water for public supply is provided generally by deep wells which tap the Magothy aquifer at depths that are presently free of contamination.

Percolation of partly treated metal-plating solutions into the upper glacial aquifer has produced a plume of contaminated ground water, whose changes in dimensions and in hexavalent chromium and cadmium content were monitored by test drilling and sampling mainly between 1949 and 1964. The plume is elongating very slowly downgradient, in the direction of the regional ground-water flow, and has moved beneath the west bank of Massapequa Creek. In 1962, the plume was about 4,300 feet long, as much as 1,000 feet wide, and from a few feet to about 70 feet thick. Maximum concentrations of chromium determined during successive investigations ranged from about 40 mg/l in 1949 to about 10 mg/l in 1962. Cadmium concentrations ranged from 0.01 to 10 mg/l, but in most places, they were less than 1 mg/l. Maximum observed concentrations of cadmium and chromium in Massapequa Creek were 0.1 and 2.9 mg/l, respectively. Concentrations of both cadmium and hexavalent chromium in most of the plume and in part of Massapequa Creek exceed the limits of 0.01 and 0.05 mg/l, respectively, recommended in the drinking-water standards of the U.S. Public Health Service.

Theoretical dispersion formulas were inadequate to explain the wide dispersal of the heavy-metal ions. The pattern and rate of injection of the plating-waste effluent, the heterogeneity of the beds and lenses, and the resultant distortion of the flow paths of the ground water, probably account for most of the longitudinal and lateral spread of the plume of plating wastes.

Another major contaminant, MBAS, consisting chiefly of ABS (alkylbenzenesulfonate), a surfactant contained in household detergents, was found in at least trace quantities in the upper three-fourths of the upper glacial aquifer. The highest concentrations of MBAS, generally 1 to 5 mg/l, were found in about the upper 20 feet of the

aquifer. Concentrations of MBAS in Massapequa Creek ranged from about 0.5 to 2.0 mg/l. These low concentrations of MBAS reportedly are not toxic, but they may cause foaming locally.

The principal conclusions of this report are:

1. A substantial plume of water contaminated by plating wastes occupies part of the upper glacial aquifer at South Farmingdale. Although the concentrations of the contaminants have been reduced since 1949, the residual concentrations greatly exceed the U.S. Public Health Service standards for drinking water.

2. No public-supply wells in the report area were contaminated by metal-plating wastes nor is such contamination imminent. The only public-supply installations in the direct path of the plume are New York City's well field and infiltration gallery at Massapequa (part of the Ridgewood system), about 2.5 miles south of the plume. Theoretically, at the present rate of movement, it would take about 30 years for the plume to reach the gallery, but the contaminated water may never reach that point owing to dilution of the wastes as they move downgradient.

3. Plating-waste contaminants in Massapequa Creek were diluted below concentrations detectable by standard methods before they reached the vicinity of the Ridgewood system at Massapequa.

4. Most of the water in the upper glacial aquifer in the overall report area was not entirely suitable for public-supply use, owing to detergent contamination, but it may be useable if diluted with uncontaminated water from other sources.

5. No evidence was obtained of downward movement of the plating wastes into the Magothy aquifer in the report area and, except at one well, water from the Magothy apparently was not contaminated by MBAS. This does not exclude the possibility of downward movement of these contaminants in the future if hydrologic conditions are changed substantially from those determined during this investigation.

6. Contamination of the upper glacial aquifer by detergents and by other sewage constituents probably will continue in those areas where individual waste-disposal systems are used. Construction of public sewers (now in progress, 1968) and advanced treatment of industrial wastes before disposal to the ground, however, should help reduce the present widespread contamination of the shallow ground water.

REFERENCES CITED

- American Public Health Association and others, 1946, Standard methods for the examination of water and sewage [9th ed.]: New York, Am. Public Health Assoc., Inc., 286 p.

REFERENCE # 5



The Changing Pattern of Ground-Water Development on Long Island, New York

GEOLOGICAL SURVEY
CIRCULAR 524

The Changing Pattern of Ground-Water Development on Long Island, New York

By R. C. Heath, B. L. Foxworthy, and Philip Cohen

ABSTRACT

Ground-water development on Long Island has followed a pattern that has reflected changing population trends, attendant changes in the use and disposal of water, and the response of the hydrologic system to these changes. The historic pattern of development has ranged from individually owned shallow wells tapping glacial deposits to large-capacity public-supply wells tapping deep artesian aquifers. Sewage disposal has ranged from privately owned cesspools to modern large-capacity sewage-treatment plants discharging more than 70 mgd of water to the sea.

At present (1965), different parts of Long Island are characterized by different stages of ground-water development. In parts of Suffolk County in eastern Long Island, development is similar to the earliest historical stages. Westward toward New York City, ground-water development becomes more intensive and complex, and the attendant problems become more acute. The alleviation of present problems and those that arise in the future will require management decisions based on the soundest possible knowledge of the hydrologic system, including an understanding of the factors involved in the changing pattern of ground-water development on the island.

INTRODUCTION

Even before the severe drought that is now (1965) affecting the Northeastern United States, Long Island was well known among water specialists for its underground-water resource, mainly as a result of both the magnitude of the ground-water resource and the unique aspects of man's utilization of that resource. The current drought has focused increased attention upon the vast amount of ground water in storage on Long Island and upon the large quantity of water being pumped from the system. In 1963, for example, an average of about 380 mgd (million gallons per day) was pumped from Long Island wells; these wells tap a fresh ground-water reservoir that has an estimated storage capacity of 10 to 20 trillion gallons. Nearly all the

water pumped was for domestic and industrial use, and this pumpage probably represents one of the largest such uses of a single well-defined ground-water reservoir anywhere in the world.

The history of ground-water development on Long Island has been thoroughly documented, largely as a result of studies made by the U.S. Geological Survey in cooperation with the New York State Water Resources Commission and Nassau and Suffolk Counties. The water development has followed a general pattern which, although somewhat related to population density and local waste-disposal practices, has been controlled largely by the response of the hydrologic system to stresses that man has imposed upon the system. The purpose of this report is to summarize the highlights of the historical pattern of ground-water development on Long Island and to consider briefly the insight that the history of development affords regarding the future development and conservation of Long Island's most valuable natural resource.

GEOLOGIC ENVIRONMENT

Long Island (fig. 1) has a land area of about 1,400 square miles and is geographically a large detached segment of the Atlantic Coastal Plain. The island is underlain by crystalline bedrock, the uppermost surface of which ranges in altitude from about sea level at the northwest corner of the island to about 2,000 feet below sea level in the southeastern part of Suffolk County (fig. 2).

The bedrock is overlain by a wedge-shaped mass of unconsolidated sedimentary deposits

hydrologic imbalance (fig. 7). The imbalance, which is accentuated because more than 70 mgd of water derived from the ground-water reservoir of these subareas currently is being discharged to the sea by way of sewage-treatment plants, is mostly clearly manifested in subarea D, where salty water is moving landward (Luszczynski and Swarzenski, 1960; Perlmutter and Geraghty, 1963). If the present trend continues, subarea D (the area of active salt-water encroachment) probably will expand at the expense of subarea E.

Subarea F, in northeastern Queens County, receives nearly its entire water supply from the New York City municipal-supply system. The subarea is sewered; however, because ground-water pumpage is negligible, the ground-water system is largely in balance.

Subarea G is the most highly urbanized and receives virtually all its water from the New York City municipal system. The entire subarea is sewered. As previously noted, large areas in Kings County were invaded by salty water because of substantial overdevelopment and the resulting decline in ground-water levels. Similarly, salty water had invaded the ground-water reservoir in parts of western Queens County. Water levels in Kings County have recovered appreciably since the mid 1940's, when the consumptive ground-water uses were drastically reduced. Presumably, the salty water is retreating seaward and is being diluted by recharge derived from precipitation, but precise data regarding these changes are lacking.

CONCLUSION

Ground water probably will continue to be the major source of water for most of Long Island (except for Kings and Queens Counties) for at least the next several decades. Moreover, if the present trends continue, the ground-water resources of the island probably will continue to be depleted—perhaps at an accelerated rate. The historic trends of ground-water development and the present status of development strongly suggest that such depletion will in time cause salt-water contamination of larger and larger parts of the ground-water reservoir. Moreover, the areas in which such contamination occurs, in addition to extending inward from the coasts, probably will also extend farther and farther eastward as the population continues to expand in that direction.

Several alternative methods of conserving and augmenting the ground-water resources

of Long Island are currently being considered. These include, among others, desalting of sea water with the use of atomic energy, artificial recharge, and the reclamation of water from sewage. The consequences of such possible measures are highly significant inasmuch as the future well-being of several million people is at stake. However, even with the most promising of conservation methods, wise management will be required to gain the fullest use from the available fresh-water supply while also preventing undue hardships resulting from local overdevelopment of the ground-water reservoir. Fully effective management requires:

1. Recognition of the unity of the hydrologic system of Long Island.
2. The best obtainable scientific information about the system and how it functions.
3. Sound evaluation of the various alternative methods of water development and conservation, guided by available scientific information—including the hydrologic consequences of the historic and present-day changing pattern of ground-water development on Long Island.

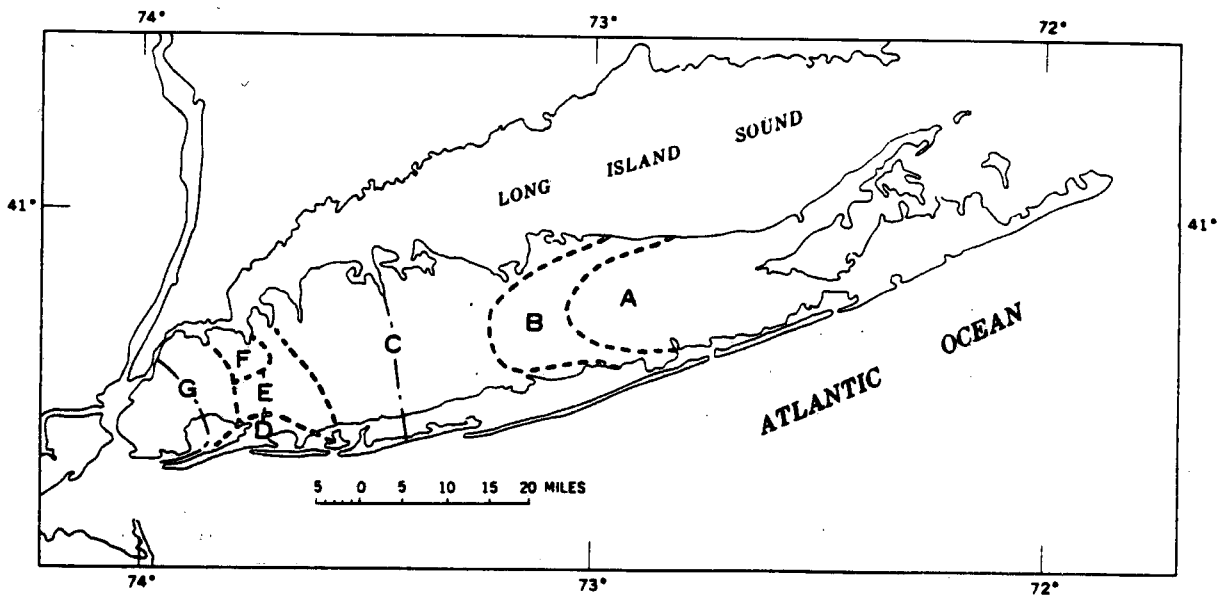
REFERENCES CITED

- Luszczynski, N. J., 1952, The recovery of ground-water levels in Brooklyn, New York from 1947 to 1950: U.S. Geol. Survey Circ. 167, 29 p.
- Luszczynski, N. J., and Swarzenski, W. V., 1960, Position of the salt-water body in the Magothy(?) Formation in the Cedarhurst-Woodmere area of southwestern Nassau County: N.Y. Econ. Geology, v. 55, no. 8, p. 1739-1750.
- Perlmutter, N. M., and Geraghty, J. J., 1963, Geology and ground-water conditions in southern Nassau and southeastern Queens Counties, Long Island, New York: U.S. Geol. Survey Water-Supply Paper 1613-A, 205 p.
- Pluhowski, E. J., and Kantrowitz, I. H., 1964, Hydrology of the Babylon-Islip area, Suffolk County, Long Island, New York: U.S. Geol. Survey Water-Supply Paper 1768, 119 p.
- Suter, Russell, de Laguna, Wallace, and Perlmutter, N. M., 1949, Mapping of geologic formations and aquifers on Long Island, New York: New York State Power and Control Comm. Bull. GW-18, 212 p.
- Swarzenski, W. V., 1963, Hydrology of northwestern Nassau and northeastern Queens Counties, Long Island, New York: U.S. Geol. Survey Water-Supply Paper 1657, 90 p.

encroachment has not yet occurred. Plans are being made to install sewers throughout the subarea.

Subareas D and E, which include parts of western Nassau and southeastern Queens Counties, are moderately to highly urbanized

and are almost completely sewered. Practically the entire water supply for these subareas is derived from wells tapping the Magothy Formation, Jameco Gravel, and the Lloyd Sand Member of the Raritan Formation. Thus, these subareas are mainly in phase 4 of development and are characterized by a



EXPLANATION

Subarea

Characteristics

- A--- Phase 2 of development. Pumpage mainly from shallow privately owned wells. Waste water returned to shallow glacial deposits through cesspools; local contamination of glacial deposits by cesspool effluent. System virtually in balance; positions of salt-water fronts unchanged.
- B--- Transition between phase 2 and 3. Pumpage from privately owned and public-supply wells. Waste water returned to shallow glacial deposits by way of cesspools; areas of cesspool-effluent contamination spreading. System virtually in balance.
- C--- Phase 3 of development. Pumpage mainly from deep public-supply wells; waste water returned to shallow glacial deposits by way of cesspools. System locally out of balance, causing local salt-water intrusion.
- D--- Phase 4 of development. Pumpage almost entirely from deep public-supply wells; waste water discharged to the sea by way of sewers. System out of balance; salty water actively moving landward.
- E--- Phase 4 of development. Pumpage almost entirely from deep public-supply wells; waste water discharged to the sea by way of sewers. System out of balance; may be subject to salt-water intrusion in the future.
- F--- Very little ground-water development. Water supply derived from New York City municipal-supply system; waste water discharged to the sea by way of sewers. System in balance.
- G--- Very little ground-water development. Water supply derived from New York City municipal-supply system; waste water discharged to the sea by way of sewers. Large areas contain salty ground water owing to former intensive ground-water development and related salt-water intrusion.

Figure 8.—Water-development subareas in 1966.

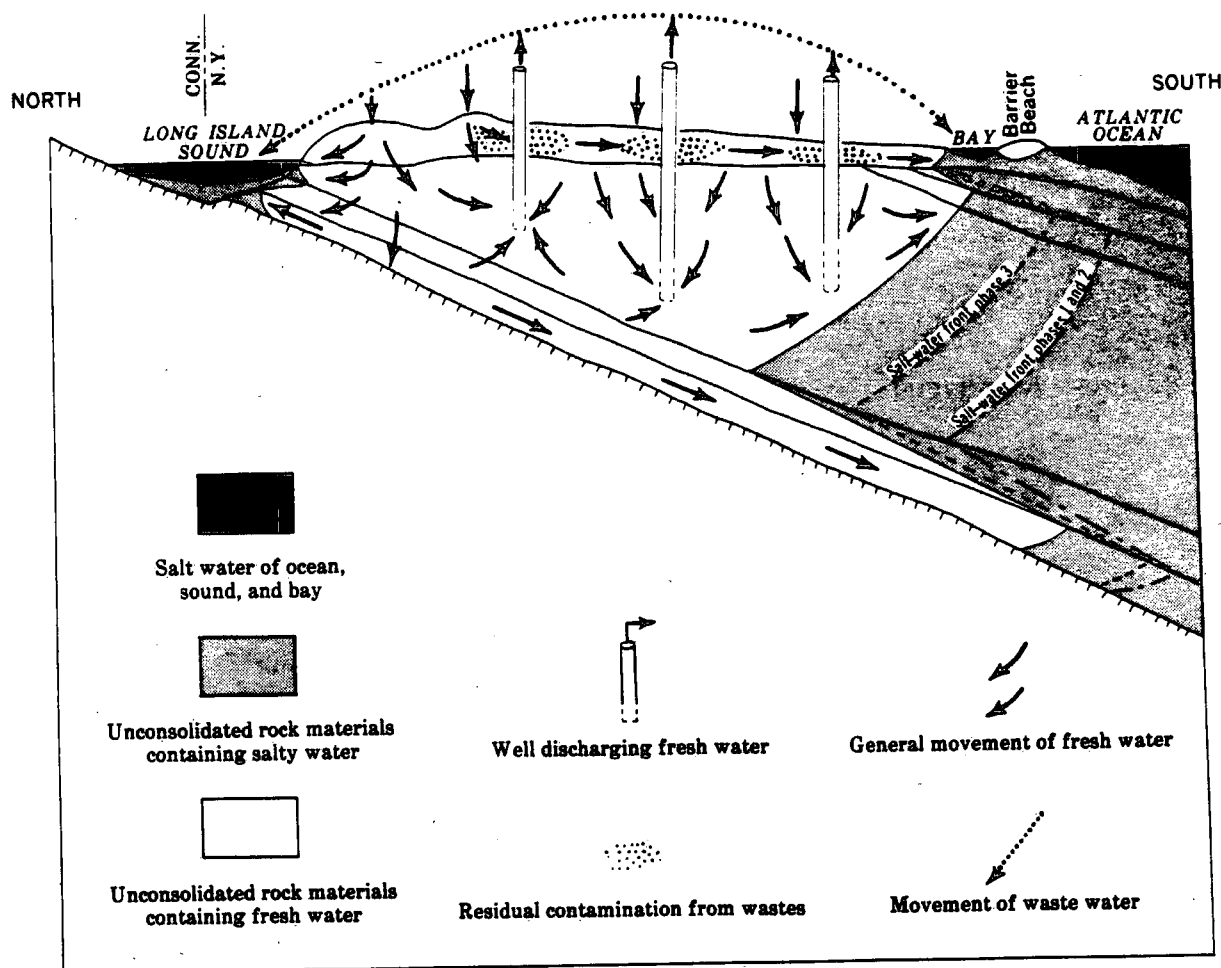


Figure 7.—Diagrammatic section showing generalized ground-water conditions during phase 4 of ground-water development (deep supply wells and waste disposal through sewers to adjacent salt-water bodies). Contacts between rock units are as shown in figure 2.

However, most of the sewage disposal is still through individually owned cesspools. Thus, the area is in a transition between phase 2 and phase 3 of development. Cesspool pollution still is not widespread, but is substantial enough to be of concern to local government agencies. Accordingly, plans are currently (1965) being made to construct sewers in the area and to gradually replace the wells that tap the glacial deposits with wells that will tap the Magothy Formation.

Subarea C includes the westernmost part of Suffolk County and the eastern two-thirds of Nassau County. Mainly because it is closer to New York City, this subarea was subjected to intensive suburban development earlier than was subarea B. Therefore, the population density and, accordingly, the water requirements in subarea C are substan-

tially greater than in subarea B. Virtually the entire water supply for subarea C is obtained from large-capacity public-supply wells. The part of the subarea that is in western Suffolk County obtains most of its water supply from public-supply wells, of which about half tap the glacial deposits and most of the remainder tap the Magothy Formation. In the part of the subarea that is in Nassau County, most of the public-supply wells tap the Magothy Formation.

Except for a few communities along the coast, most of subarea C is not sewered; practically all the domestic sewage is disposed of through individually owned cesspools. Thus, on the whole the subarea is in phase 3 of development (fig. 6). The system locally is out of balance owing to this development; however, substantial widespread salt-water

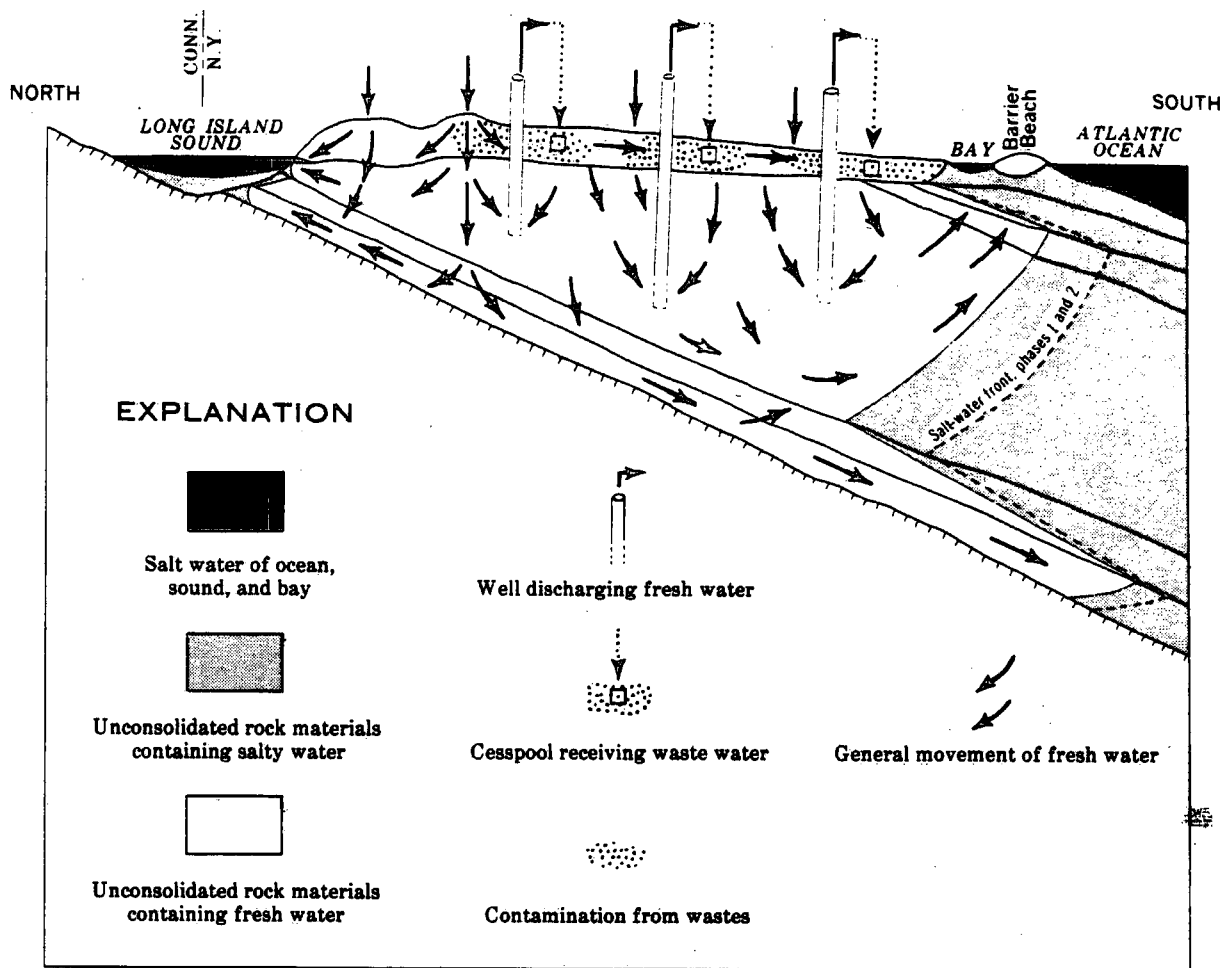


Figure 6. —Diagrammatic section showing generalized ground-water conditions during phase 3 of ground-water development (deep supply wells and waste disposal through cesspools). Contacts between rock units are as shown in figure 2.

PRESENT AREAL DIFFERENCES IN GROUND-WATER DEVELOPMENT

The present pattern of ground-water development on Long Island affords an excellent opportunity to observe and evaluate the historic trend of that development, because all the major phases of development described herein, except the predevelopment phase, can be observed now in different subareas of the island (fig. 8). Moreover, once the transitory status of present development in each subarea is recognized in relation to the pattern of historical trends, it becomes possible to predict and perhaps forestall some of the undesirable aspects of those trends.

Subarea A (fig. 8) includes roughly the eastern two-thirds of Suffolk County. Except

for several small communities, the subarea is largely rural and has the lowest population density on Long Island. On the whole, the subarea can be characterized as being in phase 2 of ground-water development (fig. 5)—that is, most of the wells in the subarea tap the shallow glacial deposits and supply water to single-family dwellings. The bulk of this water is returned to the glacial deposits through individually owned cesspools, and in overall aspect the ground-water system is still in hydraulic balance.

Subarea B, in central Suffolk County, is experiencing the impact of the suburban expansion associated with the entire New York City metropolitan area. Farms and woodlands are giving way to housing developments, and most of the pumpage in the subarea is now from large-capacity public-supply wells that tap the glacial deposits.

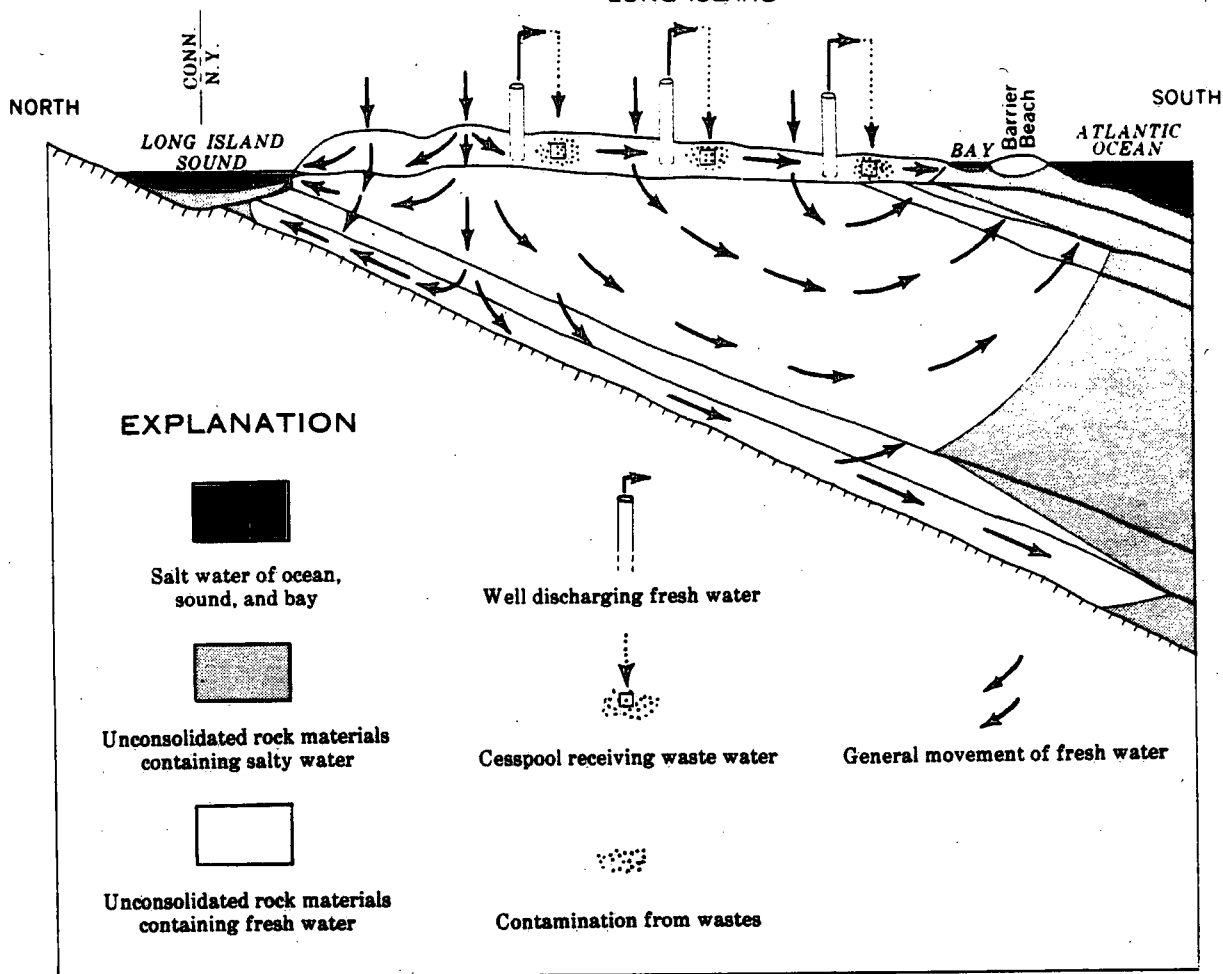


Figure 5.—Diagrammatic section showing generalized ground-water conditions during phase 2 of ground-water development (shallow supply wells and waste disposal through cesspools). Contacts between rock units are shown in figure 2.

the ground-water reservoir by means of cesspools was thereafter discharged to the sea through the sewers. Whereas the net draft on the ground-water system during the preceding phases of development was negligible, virtually all the ground water diverted to sewers during phase 4 represented a permanent loss from the system. The newly imposed stress on the ground-water system locally resulted in a rapid landward encroachment of salty water into the previously fresh ground-water reservoir. The most dramatic example occurred during the 1930's in Kings County (the Borough of Brooklyn), which by that time had been completely sewered for many years. In 1936, decreased natural recharge owing to urbanization and increased ground-water withdrawals, which during the previous few years averaged more than 75 mgd, caused ground-water levels in

Brooklyn locally to decline to as much as 35 feet below sea level (Luszczynski, 1952, pls. 1 and 2). This local overdevelopment caused contamination of large parts of the ground-water reservoir in that area from sea-water encroachment.

In 1947 virtually all pumping for public supply in Kings County was discontinued and the Borough was thereafter supplied with water from the New York City municipal-supply system, which utilizes surface-water reservoirs in upstate New York. A notable exception was ground-water withdrawal for air-conditioning use. Such usage was permitted, however, only under the condition that the water was returned to the ground-water reservoir by means of injection wells (locally referred to as "diffusion" wells).

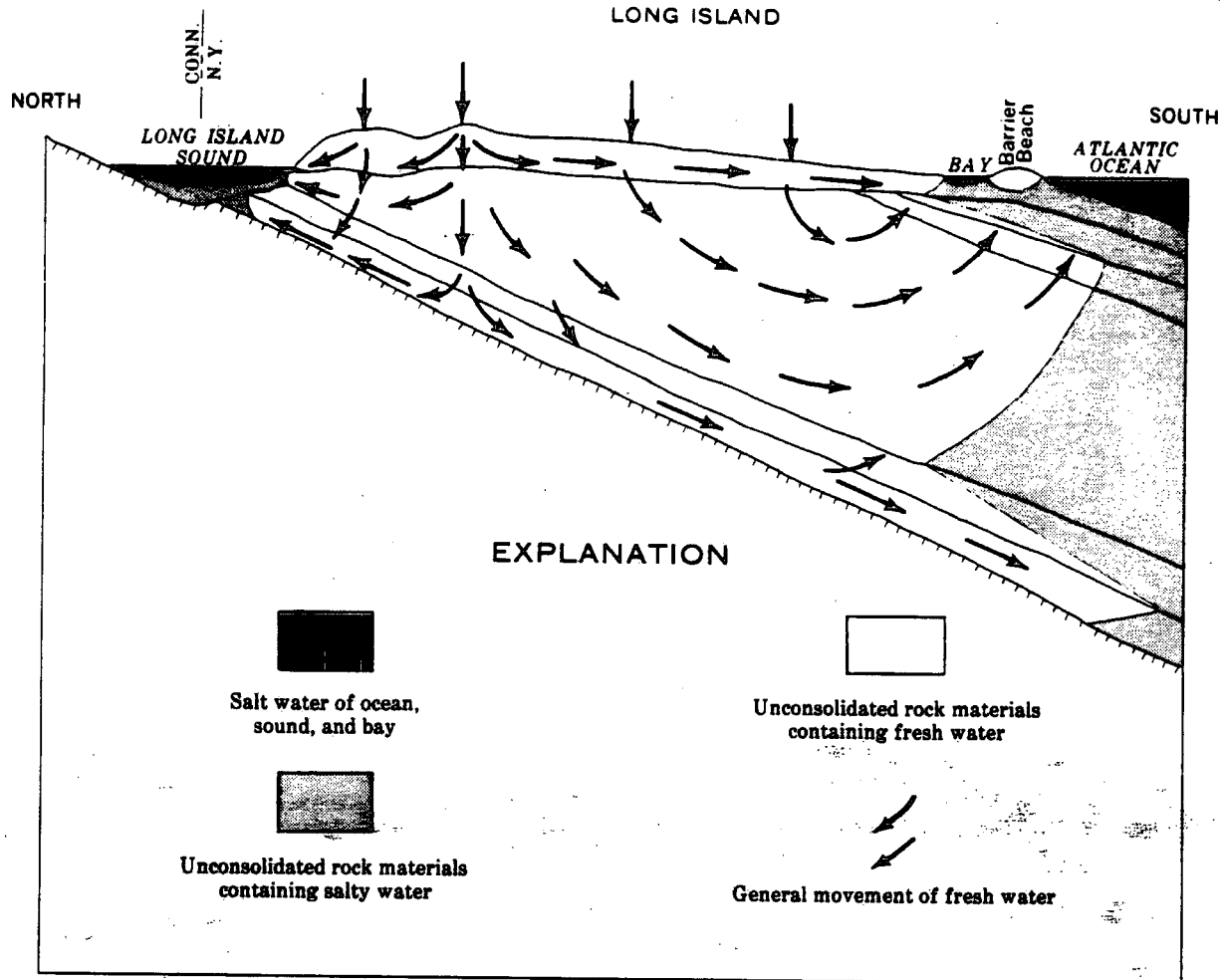


Figure 4. —Diagrammatic section showing predevelopment (phase 1) generalized ground-water conditions. Contacts between rock units are as shown in figure 2.

PHASE 3

In time, as the cesspool pollution spread, some shallow public-supply wells had to be abandoned and these were replaced with deeper public-supply wells, most of which tapped the Jameco Gravel and the Magothy Formation. Supply wells were also constructed in the deeper units at places where the glacial deposits contained water with objectionable amounts of dissolved iron or other troublesome natural constituents. Most of the water withdrawn from the deeper units was returned to the shallower glacial deposits by means of cesspools, and subsequently discharged to the sea by subsurface outflow or by seepage to streams (fig. 6).

As a result of the withdrawal of water from the Magothy Formation and the Jameco Gravel, and the concurrent decrease in hy-

draulic heads in these units, the downward movement of ground water from the overlying glacial deposits locally was increased. However, the increased downward movement only partially compensated for the withdrawals of water from the Magothy and Jameco deposits. Locally, a hydraulic imbalance developed in the Magothy and Jameco deposits and caused a decrease in the amount of fresh ground water in storage and a landward movement of salty water.

PHASE 4

The next major phase in the development of ground water on Long Island (fig. 7) was the introduction of large-scale sewer systems—notably in that portion of Long Island that is part of New York City (Kings and Queens Counties). Most of the pumped ground water that previously had been returned to

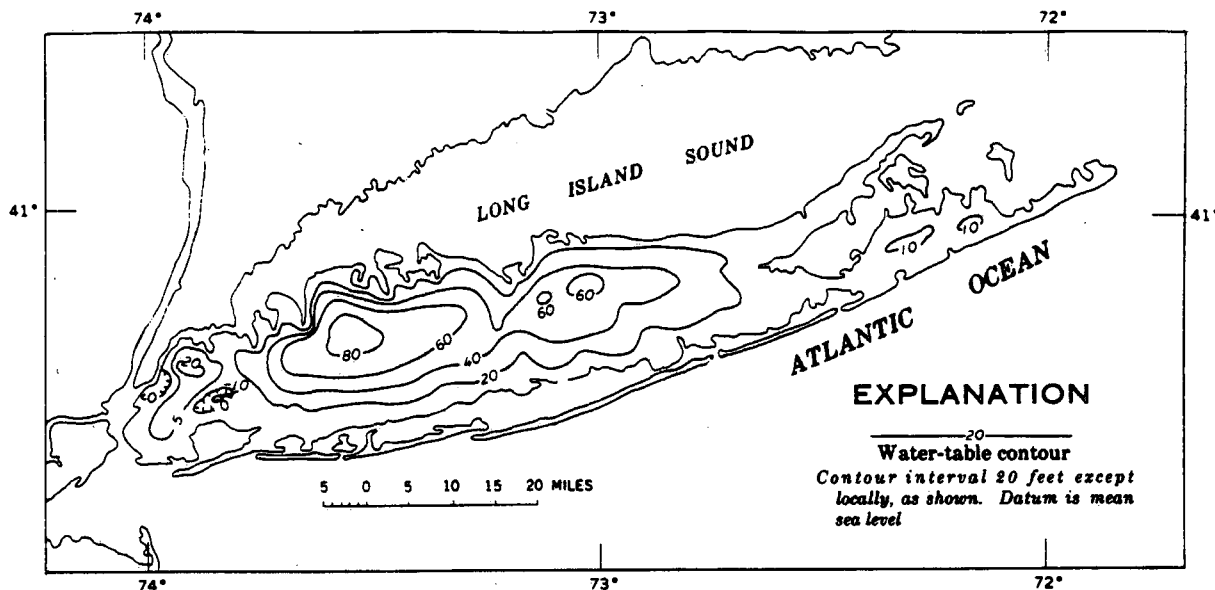


Figure 3.—Generalized contours on the water table (the upper surface of the ground-water reservoir) in 1961.

that about 90 percent of the total recharge ultimately discharged from the glacial deposits (mainly by seepage to streams), and about 10 percent discharged by subsurface outflow from the Magothy Formation, the Jameco Gravel, and the Lloyd Sand.

The water table on Long Island (fig. 3) and also the piezometric (pressure) surfaces of the underlying artesian aquifers (which have about the same general shape as the water table) form elongate mounds following roughly the configuration of the land surface. Two prominent highs characterize the water table—one centered in Nassau County and one centered in Suffolk County. Northwestern Queens County also has a small high in the water table. Other notable features are the cones of depression that extend below sea level in Kings and Queens Counties; these cones are in areas of past or current local overdevelopment of ground water.

CHANGES IN GROUND-WATER DEVELOPMENT WITH TIME

PHASE 1—PREDEVELOPMENT CONDITIONS

Ground-water development on Long Island has progressed and is progressing through several distinct phases. Under natural or predevelopment conditions (fig. 4), the hydrologic system was in overall equilibrium

and long-term average ground-water recharge and discharge were equal. The general positions of the subsurface interfaces between fresh and salty water in each of the previously described geologic units were stable, reflecting the overall hydrologic balance. The interfaces were virtually at the coasts in the glacial deposits and were offshore in the underlying units.

PHASE 2

In the initial stage of development (fig. 5), which began with the arrival of the first European settlers, virtually every house had a shallow well drawing water from the glacial deposits and a cesspool returning waste water to the same deposits. As the population increased, individual wells were abandoned and public-supply wells were installed in the glacial deposits. The individual cesspools, however, were retained and little water was lost from the system during use. Although a considerable amount of ground water was being withdrawn, practically all of it was returned to the same aquifer from which it was removed. In general, therefore, the system remained in balance, and the positions of the interfaces between fresh and salt water remained practically unchanged. However, this cycle of ground-water development and waste-water disposal resulted in the pollution of the shallow ground water in the vicinity of the cesspools.

that attain a maximum thickness of about 2,000 feet. These deposits constitute the ground-water reservoir of Long Island and can be divided into six major stratigraphic units, which differ in their geologic ages, mineral composition, and hydraulic properties. These units are, from oldest to youngest, (1) Lloyd Sand Member of the Raritan Formation, (2) clay member of the Raritan Formation, (3) Magothy Formation, (4) Jameco Gravel, (5) Gardiners Clay, and (6) glacial deposits. (Suter and others, 1949). The first three units listed are of Cretaceous age, and the last three are of Pleistocene age.

The Lloyd Sand Member of the Raritan Formation has a maximum thickness of about 300 feet and consists mainly of fine to coarse sand and some gravel and interbedded clay. It forms the basal water-bearing unit of the ground-water reservoir. The clay member of the Raritan Formation is composed mainly of clay but locally contains considerable sand; it also has a maximum thickness of about 300 feet. Hydraulically, the clay member is a leaky confining layer for the Lloyd Sand Member—retarding, but not preventing, vertical leakage of water to and from the Lloyd.

The Magothy Formation on Long Island is partly correlative with the Magothy Formation in New Jersey. It consists of complexly interbedded layers of sand, silt, and clay and some gravel in the lower part. The complexity of the interbedding and the character of fossils it contains suggest that the formation was mainly laid down under continental (flood-plain) conditions. The Magothy Formation is the thickest unit of the ground-water reservoir on Long Island, attaining a maximum thickness of about 1,000 feet. Its horizontal permeability differs widely from place to place and is considerably higher than its vertical permeability. It commonly yields more than 1,000 gpm (gallons per minute) per well. Water in the formation is largely under artesian conditions.

Near the north and south shores of the island, the Magothy Formation locally is overlain by the Jameco Gravel. The maximum thickness of the Jameco is about 200 feet. It consists mainly of medium to coarse sand, but locally contains abundant gravel and some silt and clay. The Jameco Gravel is moderately to highly permeable and yields as much as 1,500 gpm per well. Water

in the formation occurs under artesian conditions.

The Gardiners Clay is mainly restricted in extent to two moderately narrow bands that parallel the north and south shores, and it is commonly underlain by either the Jameco Gravel or the Magothy Formation.

The surface of Long Island is composed mostly of material deposited either directly by Pleistocene continental ice sheets or by melt water derived from the ice sheets. These glacial deposits consist mainly of sand and gravel outwash in the central and southern parts of the island, and mixed till and outwash atop and between the hills in the northern part of the island. The glacial outwash deposits are highly permeable and therefore permit moderately rapid infiltration of precipitation.

HYDROLOGIC SYSTEM

The four major water-bearing units of the ground-water reservoir of Long Island are the glacial deposits, Jameco Gravel, Magothy Formation, and Lloyd Sand Member of the Raritan Formation (fig. 2). These four units contain mostly fresh ground water; however, locally they contain salty ground water or they are hydraulically connected with salty water of the ocean, sound, or bays. Under natural conditions recharge to the ground-water reservoir resulted entirely from the infiltration of precipitation, which is estimated to have averaged roughly 1 mgd per square mile (Swarzenski, 1963, p. 35). Most of the ground water moved laterally through the glacial deposits and discharged into streams or into bodies of salt water bordering the island without first reaching deeper water-bearing zones. Most of the remainder of the ground water moved downward through the glacial deposits into the Jameco Gravel or Magothy Formation, and from there part flowed laterally to the ocean and the remainder flowed downward through the clay member of the Raritan Formation into the Lloyd Sand Member. (See fig. 4.)

Estimates of ground-water discharge under natural conditions can be developed by extrapolation of data listed by Pluhowski and Kantrowitz (1964, p. 38-55) for the Babylon-Islip area, a large and reasonably representative part of Long Island. Those data suggest

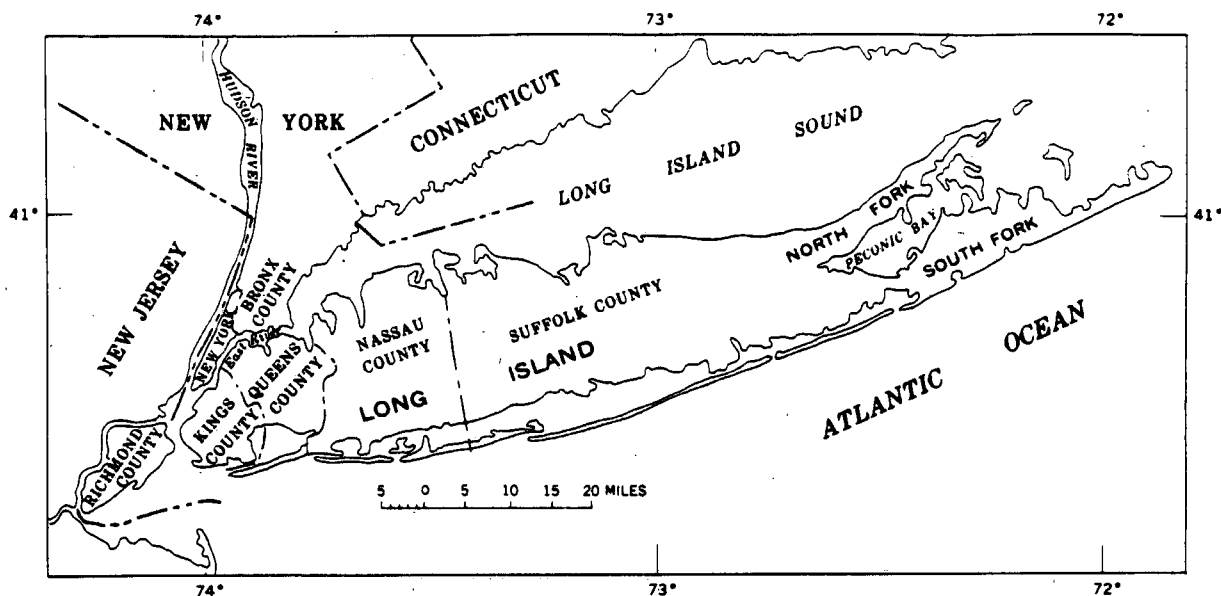


Figure 1.—Long Island and vicinity.

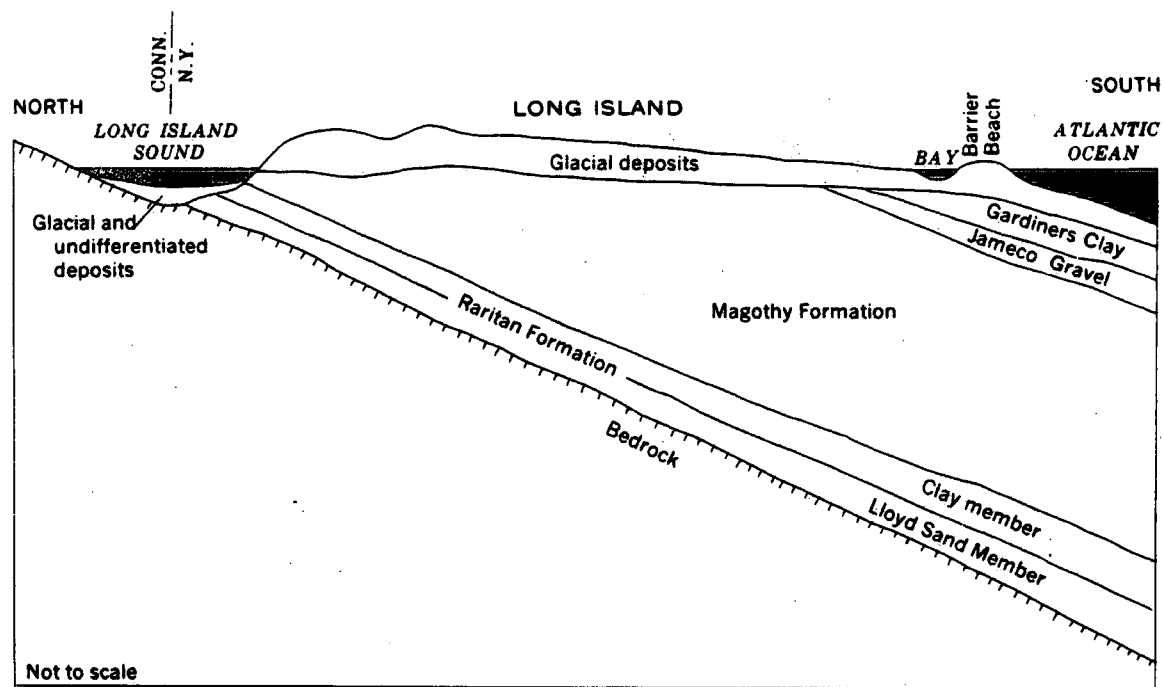


Figure 2.—Diagrammatic section showing general relationships of the major rock units of the ground-water reservoir in Nassau County.

REFERENCE #6

Uncontrolled Hazardous Waste Site Ranking System

A Users Manual (HW-10)

Originally Published in
the July 16, 1982, *Federal Register*

United States
Environmental Protection
Agency

1984

REFERENCE #7

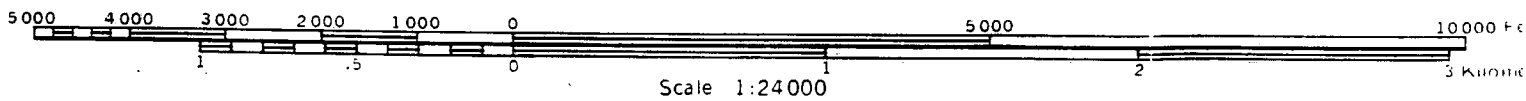
United States
Department of
Agriculture

Soil
Conservation
Service

In cooperation with
Cornell University Agricultural
Experiment Station

Soil Survey of Nassau County New York





a hazard to the ground water or to water in adjacent tidal areas because the sandy material is a poor filter.

Settling and compaction of the organic layers limit the unit as a site for dwellings without basements, and the water table is a limitation for dwellings with basements. Some areas of these soils are limited by tidal flooding during intense coastal storms. The use of pilings helps to overcome or alleviate the settling and wetness.

Settling of the organic material is the main limitation of the soil as a site for local streets and roads. The rate of settlement varies with time and the amount of organic material.

The high sand content limits recreation use and landscaping, and settling is a limitation, especially for permanent structures. Some intensively used areas require a veneer of loamy soil to improve trafficability and to improve water holding capacity for better support of plants. Topsoil, fertilizers, and irrigation are usually needed to overcome droughtiness and low fertility when establishing lawns and shrubs, and most species must be salt tolerant.

This unit is poorly suited to all types of wildlife habitat.

Uf—Udorthents, refuse substratum. This unit consists of nearly level to steep, sandy soils in sanitary landfills that have been reworked by earth-moving and grading equipment to cover trash and other refuse. Often the refuse is partly covered or mixed with the sandy fill material. The sides of most areas are steep, and the tops are nearly level or gently sloping. The areas are mostly rectangular or irregular in shape and range from 15 to 100 acres. Slope ranges from 0 to 35 percent, and the slopes are smooth or convex.

Commonly, the upper 2 to 3 feet of this unit is mixed layers of sandy fill material. This material overlies layers of garbage and refuse which range in thickness mainly from 2 to 10 feet. Where the sandy material is used just for daily cover, it is likely to be thinner than 2 feet.

Some areas of this map unit are in former sand and gravel pits, and others have been filled with the original soil material.

Properties—

Permeability: Variable but generally ranges from very rapid to moderate.

Water table: Variable, depending upon elevation of the unit and the level of the water in adjacent soils.

Available water capacity: Mainly very low.

Erosion hazard: Moderate on sloping areas; severe on steep areas.

Most active sanitary landfills do not have a plant cover. Older or abandoned landfills have varying amounts of grasses, weeds, and shrubs.

Settling of the underlying material and the instability of the material are major limitations of this unit for most types of development, including housing, local roads and streets, and septic effluent disposal systems.

Droughtiness and low natural fertility limit the unit for landscaping and make the use of topsoil, fertilizers, and irrigation necessary.

Onsite investigation is necessary to determine the potentials and limitations of this unit for any use.

Ug—Urban land. This map unit consists of areas where at least 85 percent of the surface is covered with asphalt, concrete, or other impervious building material. These areas mostly are parking lots, shopping centers, industrial parks, or institutional sites. Many are in the business centers in the villages and cities. Most areas are nearly level, and some are gently sloping. A few small areas, mostly in the northern part of the county, are strongly sloping. Many areas are rectangular or long and narrow and are mainly adjacent to local main thoroughfares. The areas range from about 3 acres to as much as several hundred acres.

Included with this unit in mapping are small areas of soil that has not been appreciably altered or that is not under an impervious cover. These areas are mainly in lawns or other landscaped areas. Most of the included open areas are well drained: Riverhead, Hempstead, or Enfield soils or excessively drained Udipsamments.

In many areas rapid or very rapid runoff prevents adequate discharge of runoff from intense rainstorms to safe outlets. A few areas are in low spots where seasonal wetness sometimes causes temporary flooding of the surface or frost heaving and subsequent breakup of surface pavements.

Uh—Urban land-Hempstead complex. This unit consists of urbanized areas and very deep, well drained soils. It is on nearly level plains. The areas of this unit are variable in shape and are as small as 10 acres, but some areas are as much as 1,000 acres. Slope ranges from 0 to 3 percent, but in most areas that are not near drainageways or depressions it is less than 2 percent. This unit consists of about 75 percent urbanized areas, 20 percent Hempstead soils, and 5 percent other soils. The urbanized areas and Hempstead soils are so intermingled that it was not practical to map them separately.

The urbanized areas consist of buildings, roads, driveways, parking lots, and other manmade structures.

The typical sequence, depth, and composition of the layers of Hempstead soils are as follows—

Surface layer:

Surface to 11 inches, black silt loam

Subsurface layer:

11 to 15 inches, dark brown silt loam

Subsoil:

15 to 29 inches, yellowish brown silt loam

REFERENCE #8



MEMORANDUM

TO: Site File
FROM: Terri Gerrish
SUBJECT: Alsy Manufacturing
DATE: Inactive - SAO
Typed: 06/14/85

Received from:
Nassau Co. Dept. of Health

SAMPLING TRIP REPORT
DIVISION OF ENVIRONMENTAL ENFORCEMENT

ENFORCEMENT CATEGORY: INACTIVE - SUMMARY ABATEMENT ORDER

FIELD UNIT: White Plains

SAMPLING DATE: 05/08/85

SITE NAME: Alsy Manufacturing
270 Duffy Ave., Hicksville,
New York 11801

1. Sampling Locations: See attached sketch.

2. Sample Description: See attached table.

3. Laboratory Receiving Samples: ERCO
205 Alewife Brook Parkway
Cambridge, MA 02178

4. Sample Dispatch Data:

Location sent from: Federal Express, Hicksville, L.

Airbill Number: 626 292 063

Date & Time sent: 05/08/85 1900 hrs.

Sent by: Terri Gerrish

JUL 1 - 1985

JUN 26 1985

RECEIVED
DIVISION OF ENVIRONMENTAL ENFORCEMENT
JUN 26 1985

NASSAU COUNTY
DEPARTMENT OF HEALTH
DIV. OF ENVIRONMENTAL HEALTH

5. Sampling Personnel:

<u>Name</u>	<u>Organization</u>	<u>Duties on Site</u>
Terri Gerrish	NYSDEC - DEE	Engineer, sampler
Dick Torrey	NYSDEC - DSHW ALB.	Sampler
Bill O'Brien	NYSDEC - DIV. WATER Reg. I	Assistant
Bob Willis	NCDOH	---
Ram Iyer	H2M Corp.	Consultant for Alsy
John	Alsy	Plant Manager

6. Safety Requirements:

- o Latex and nitrile gloves
- o HNu readings taken at opening of each sump
- o De-contamination by Alconox solution and water rinse
- o Tyvek suits

7. General:

Weather Conditions: Mild -- low to mid 60's; partly cloudy;
moderate breeze.

Comments & Observations:

- o Sampling equipment pre-cleaned with Alconox solution, water, acetone, methanol, hexane, methanol, distilled water.
- o Sampling tools used for composite samples were wiped and brushed with Alconox solution, water and distilled water between portions of composite.

- o All "E" sample numbers refer to liquid samples.
All "R" sample numbers refer to soil/sludge samples.
- o All samples for EP toxicity analysis were collected into 1/2 pint clear glass jars. All samples for metals analysis were collected into 1/2 liter plastic containers with 5 ml. concentrated nitric acid. All samples for volatiles were collected into 40-ml. vials with teflon septums.
- o All liquid samples were collected with a pre-cleaned PVC bottom check valve bailer.
- o Soil/sludge samples from pools or catch basins were collected with a pre-cleaned Eckman dredge.
- o Soil samples from the ground surface were collected with a pre-cleaned plastic scoop. The soil pile was augered, then sampled with a stainless steel sampler at a depth of approx. 1 to 2 ft.
- o Soil composites were mixed with a plastic scoop on teflon-coated foil.

TAG/jg
cc:

Bob Willis
Dick Torrey.
Stan Juczak
Ted Sanford

SAMPLING DATA TABLEALSY MANUFACTURING

DEC SAMPLE NO.	(See attached map) LOCATION & METHOD	SAMPLE DESCRIPTION AND COMMENTS	REQUESTED ANALYSIS
E185-222-01	Composite - 2 locations. West and center catch basins in receiving area parking lot.	Liquid. No HNu reading	Total metals Volatiles (Method 601 a 503.1)
E185-222-02	Grab Leaching pool East # 1	Liquid. No HNu reading	Same as E185-222-01
E185-222-03	Composite - 3 locations. Two leaching pools north of (behind) Cycle II, and 6-inch pipe.	Liquid. No HNu reading	Same as E185-222-01
E185-222-04	Composite - 2 locations. Middle of shipping area, north and south pools. South pool collected near bottom. North pool collected with plastic jug.	Liquid. No HNu reading South pool: 3½ feet to water. Approx. 8 ft. of water. North pool: 2 ft. to water. Approx. 3-4 inches of water.	Same as E185-222-01

SAMPLING DATA TABLE

ALSY MANUFACTURING

DEC SAMPLE NO.	(See attached map) LOCATION & METHOD	SAMPLE DESCRIPTION AND COMMENTS	REQUESTED ANALYSIS
E185-222-05	Grab. West pool in shipping area. Note: Tried to dredge bottom for visual inspection of material, but dredge would not trip.	Liquid. HNu reading = 4ppm 2½ feet to water. Approx. 8 inches of water. Pool had slight sheen on surface. Sample had slight chemical odor and suspended sediment.	Same as E185-222-01
E185-222-06	Grab. East pool in shipping area.	Liquid. HNu = 2 ppm. Approx. 5 ft. to water, approx. 7-8 ft. of water, approx. 6 ft. diameter	Same as E185-222-01
TRIP BLANK	From lab, dated 05/01/85.	Water.	Volatiles
E185-012-01	Composite - 3 locations. East catch basin (Dry well # 1) in receiving area, West # 1 pool and West # 2 pool. Note: H2M collected each area separately since Dry well # 1 appeared to be soil rather than sludge.	Soil/sludge Dry Well # 1: sandy, gritty loose brown material. West # 1: Approx. 10 ft. of water. Wet, gelatin-like light blue-green material with some brown, tan, orange streaks. Slight odor. West # 2: Wet. Olive green, gray-brown metals-sludge- type material. Possible odor.	EP toxicity for metals

SAMPLING DATA TABLE

ALSY MANUFACTURING

P.

DEC SAMPLE NO.	(See attached map) LOCATION & METHOD	SAMPLE DESCRIPTION AND COMMENTS	REQUESTED ANALYSIS
E185-012-01B	Grab. West # 1 pool.	Same as West # 1 above. Collected since solvent odor present.	Volatiles
R185-012-02	Grab. West # 3 pool.	Sludge. Dense bluish and looser olive green typical metals sludge. Some reddish grains. Trace amount of sand.	EP toxicity for metals Volatiles
R185-012-03	Grab. East # 1 pool	Soil/sludge. Gray wet gelatin sludge- like material.	EP toxicity for metals Phenols
R185-012-04	Composite - 4 locations. Pile northwest of leaching area. Four borings.	Soil. Soil with minute, colored chips.	EP toxicity for metals

SAMPLING DATA TABLE

ALSY MANUFACTURING

P. 4

DEC SAMPLE NO.	(See attached map) LOCATION & METHOD	SAMPLE DESCRIPTION AND COMMENTS	REQUESTED ANALYSIS
R185-012-05	Composite - 3 locations. Sludge crust from railroad siding area immediately north of Cycle II.	Sludge. Brown, dry, caked material	EP toxicity for metals Phenols
R185-012-06	Composite - 3 locations. Adjacent to west wall of Cycle II building - 2 Cycle II sinks discharge area and plating overflow discharge area.	Soil. H2M collected individual grab samples.	EP toxicity for metals Phenols
R185-012-07	Grab. Shipping area loading dock near dumpster adjacent to wall.	Soil. Glass, stones, soil with colored chips.	EP toxicity for metals Phenols

TAG/jg

New York State Department of
Environmental ConservationDivision of Environmental
EnforcementSite Code _____
Priority (explain) _____

MATERIALS SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Environmental Sample ☒
Hazardous Waste Sample _____

Collector's Name R.G. TORREY Telephone (515) 457-5637
 CT Custodian R.G. TORREY Telephone same
 Address 50 WOLF RD, RM 414 ALBANY NY 12233
 Number Street City State ZIP
 Date Sampled 12/15/85 Time Sampled 1:30-6:00 PM Hours
 Waste Type Code _____ Other _____

Note: All R155 are
soil/sludge
All E155 are
water/liquids

Lab No.	Collector's Sample No.	Type of Sample	Field Information
plastic vials	E155-222-01	water composite	Receiving, west & center
plastic vials	E155-222-02	water	East #1
plastic vials	E155-222-03	water composite	Leaching, pools behind Cycle II.
plastic vials	E155-222-04	water composite	Shipping cart, middle N & S pools
plastic vials	E155-222-05	grab water	Shipping cart, west pool
plastic vials	E155-222-06	grab water	Shipping cart, east pool
	TRIP BLANK	water	40-ml vial

SEE NEXT PAGE

Analysis Requested: All (water) plastic bottles w/ H₂O₂: Total Metals. All 40-ml vials: EPA 601 and 603.1. All R155 in small clear glass vials: ES for metals.

All R155 in brown glass w/ H₂SO₄ and CuSO₄: total phenols

Special Handling and/or Storage: 4°C

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____

New York State Department of
Environmental ConservationDivision of Environmental
EnforcementSite Code _____
Priority (explain) _____

MATERIALS SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

* Environmental Sample ☒
* Hazardous Waste Sample _____Collector's Name R.G. TORREY Telephone (518) 457-5637CT Custodian R.G. TORREY Telephone _____Address See pg 1 street city state zip
Number _____Date Sampled 05/05/85 Time Sampled 1:30 - 6:00 PM Hours

Waste Type Code _____ Other _____

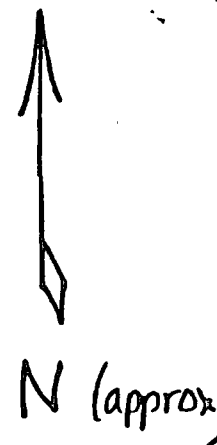
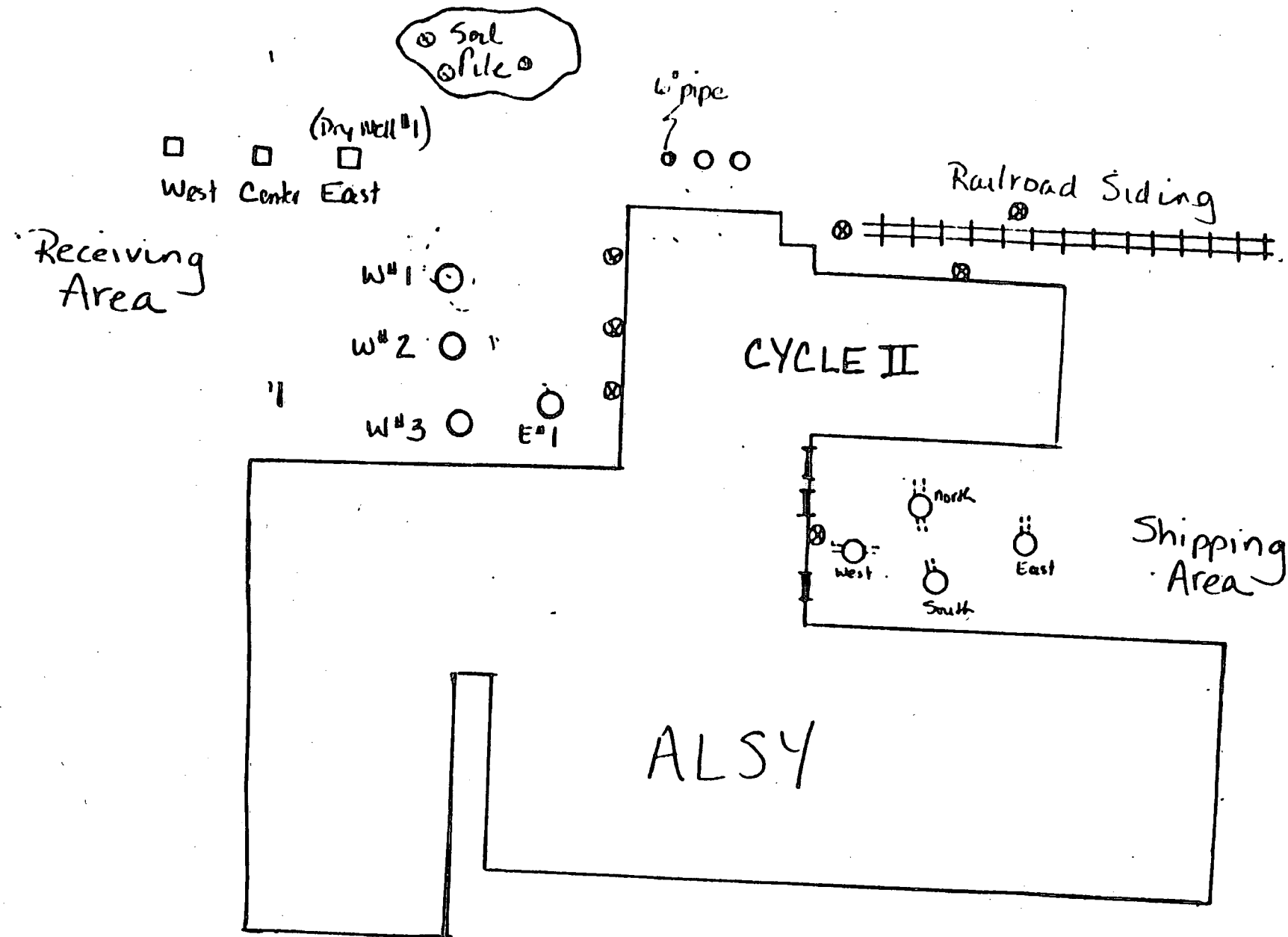
Lab No.	Collector's Sample No.	Type of Sample	Field Information
EP tox	R155-012-01	composite sediment	East catch basin W#1, W#2 peels
volatiles	R155-012-01B	grab	40-ml vials from W#1
EP tox & vol.	R155-012-02	grab sludge	W#3, clear glass plus vials
Phen & phenol	R155-012-03	grab soil	E #1 peels
EP tox	R155-012-04	composite soil	NW large pile
EP tox & phenols	R155-012-05	composite sludge	RR siding, crust
EP tox & phenol	R155-012-06	composite soil	West wall of Cycle II
EP tox & phenol	R155-012-07	grab soil	Shipping loading dock by dumpster

(SEE FIRST PG ALSO)

Analysis Requested: All RISS in small clear glass: EP tox for metals
 All R vials: TPA 601 and 503.1. All R in brown glass with
 H₂SO₄ and CuSO₄: tot phenols. All E plastic w/ 100%: tot metals. All E vials:
 601 & 503.
 Special Handling and/or Storage: 4°C

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____



NOT TO SCALE

- Catch Basin
- Leaching pool
- ⊗ Soil Sample

RECEIVED
NYSDEC

New York State Department of Environmental Conservation
Building #40 SUNY
Stony Brook, New York 11794

Henry J. Con.

May 6, 1985

Mr. Robert Gentile
Alsy Manufacuturing
270 Duffy Avenue
Hicksville, NY 11801

Dear Sir:

Mr. Gindel has stated that you are authorized to make decisions regarding cleanup and remedial investigation in his absence. Representatives of this Department and Nassau County Department of Health have performed inspection of your facility, during the week of 29 April 1985, for the purpose of determining compliance with the Summary Abatement Order, dated April 55.

In order to achieve compliance with item number 1 of that order, the following additional actions are required:

1. The trough around the plating area; the floor of the trough before the discharge pipe should be filled with concrete to the level of the floor.
2. The PVC pipe along the west wall of the building, formerly a sink drain should be removed completely.
3. The PVC pipe in the floor of the Cycle 11 storage room should be filled with concrete flush with the floor.
4. The PVC pipe leading from the northern cesspool in the SPDES Outfall to the railroad siding must be dug up and completely removed.
5. The black PVC pipe in the driveway on the west side of 280 Duffy Avenue, apparently a former sink drain must be cut off at ground level and the area where the pipe entered the ground paved over.
6. The floor drain near the treatment system must be removed and the opening filled with cement.
7. The pipes entering the cesspool east of the SPDES outfall on the north side (the cesspool discovered by the well drillers) must be cut off and sealed at the foundation line of the building, and the pipes from the foundation line to the

cesspool removed.

8. The pipes from the foundation line to the SPMIS outfall must be removed.

With respect to items II.a. and II.b., it is our understanding that your firm is investigating the use of your pretreatment facility as the disposal point for this liquid. Your determination along with supporting documents should be submitted to this Department no later than May 15, 1985. Should this course of action not be taken, the pumping out and proper removal of this liquid must commence immediately after that date.

Concerning item II.c., this Department will commence soil sampling on 8 May 85 to facilitate your firm's desire to take split samples. Any soil removed prior to receipt of sample results must be considered hazardous waste.

Since your site is also listed on the Inactive Hazardous Waste Disposal Site Registry, further remedial investigations will be required. You will be contacted shortly by our Regional Attorney's office concerning an Order on Consent to enter this work.

Sincerely yours,

Philip Barbato
Regional Water Engineer

PB:sp

cc: A. Yerman
T. Sanford
J. Scherb
G. Donohue
J. Iannotti
R. Piagione

New York State Department of Environmental Conservation

Building #40 SUNY
Stony Brook, NY 11794

Received from
NYSEDAC Region 1

Henry G. Williams
Commissioner

July 5, 1985

CERTIFIED - RETURN RECEIPT

Al Gindel
Alsy Manufacturing
270 Duff Avenue
Hicksville, NY 11801

Dear Mr. Gindel:

This department conducted an inspection of your facility on 6/24/86. It was noted that the cleanup work has not yet begun as outlined in our May 6, 1985 letter.

We have also received analytical results of samples taken during our inspection of 5/8/85. The analysis indicates the wastes are hazardous and therefore, should be disposed of as such.

In order to achieve compliance with the Summary Abatement Order dated April 4, 1985, you are hereby requested to complete the following items in addition to the items stated earlier in our letter of May 6, 1985:

1. Remove all liquid wastes from all manholes, catchbasins and leaching pools.
2. Remove all visually contaminated sludge from manholes, catchbasins and leaching pools. To ensure proper cleaning, two additional feet of soil should be excavated and removed beyond the visually detectable contaminated sludge level.
3. All wastes are to be considered hazardous and must be removed by a licensed hauler and disposed of at an approved hazardous waste facility. Please provide the EPA I.D.#'s for the hauler and facility to be used.
4. Disconnect and remove all pipings leading to the manholes, catchbasins and leaching pools.

Please be advised that non-compliance with a summary abatement order could be considered a new violation and appropriate enforcement actions may be initiated accordingly. In order to avoid further actions, the above items and those contained in our May 6, 1985 letter should be completed within ten working days from the date of receipt of this letter.

You are requested to notify the department and the MCDH forty-eight hours prior to beginning of the actual cleanup work.

If you have any questions, please advise.

Sincerely yours,

Philip Barbato
Philip Barbato, P.E.
Regional Water Engineer

PB:DB/sp
Attachment

cc: A. Yerman
D. Banerjee
T. Sanford
G. Donohue
J. Iannotti
R. Piagione
H. Plant

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Received from:
Nassau Co. Dept. of Health

Owner or
Agent
Address:

Wiley

Hicksville

Inspector

DATE

COMMENTS

4/12/85 at 10:00 AM rec'd a call from
Rocky Ruggione, DEC Enforcement Dir., White
Plain. As a result of a summary abatement
order they issued to Alcy, Alcy has informed
them this A.M. that H₂M will be
on site today, time unknown, to sample
basement and soil and plan to do
cleanup next week some time. DEC
will have someone on site observing, but
have info from Region I office
just letting us know his case
was never to have police there. Supposedly
this operation will have no bearing on our
long term investigation.

JF.

4/12/85

72-9060

arrived on site with John Cassaburi (Alcy) and
Ronon S. IYER (H₂M). Ronon was taking water
samples from 4 pools. These samples are to be
tested for (1) metals (2) volatile organics
I mentioned that they should test dry well on
Hoch-Tap lot because leaching pools were
being pumped into this one at a time.
Soil samples were to be taken from Soil Mound W-1
which was topsoil that was scraped from open area
on west side of building. Soil was to be taken from
another soil pile on East side of building (See Diagram)

ENVIRONMENTAL
HEALTH
Continuation Sheet:
Nassau County Health Department

Owner or

Agent :

Address:

Alsey

Hicksville

Inspector

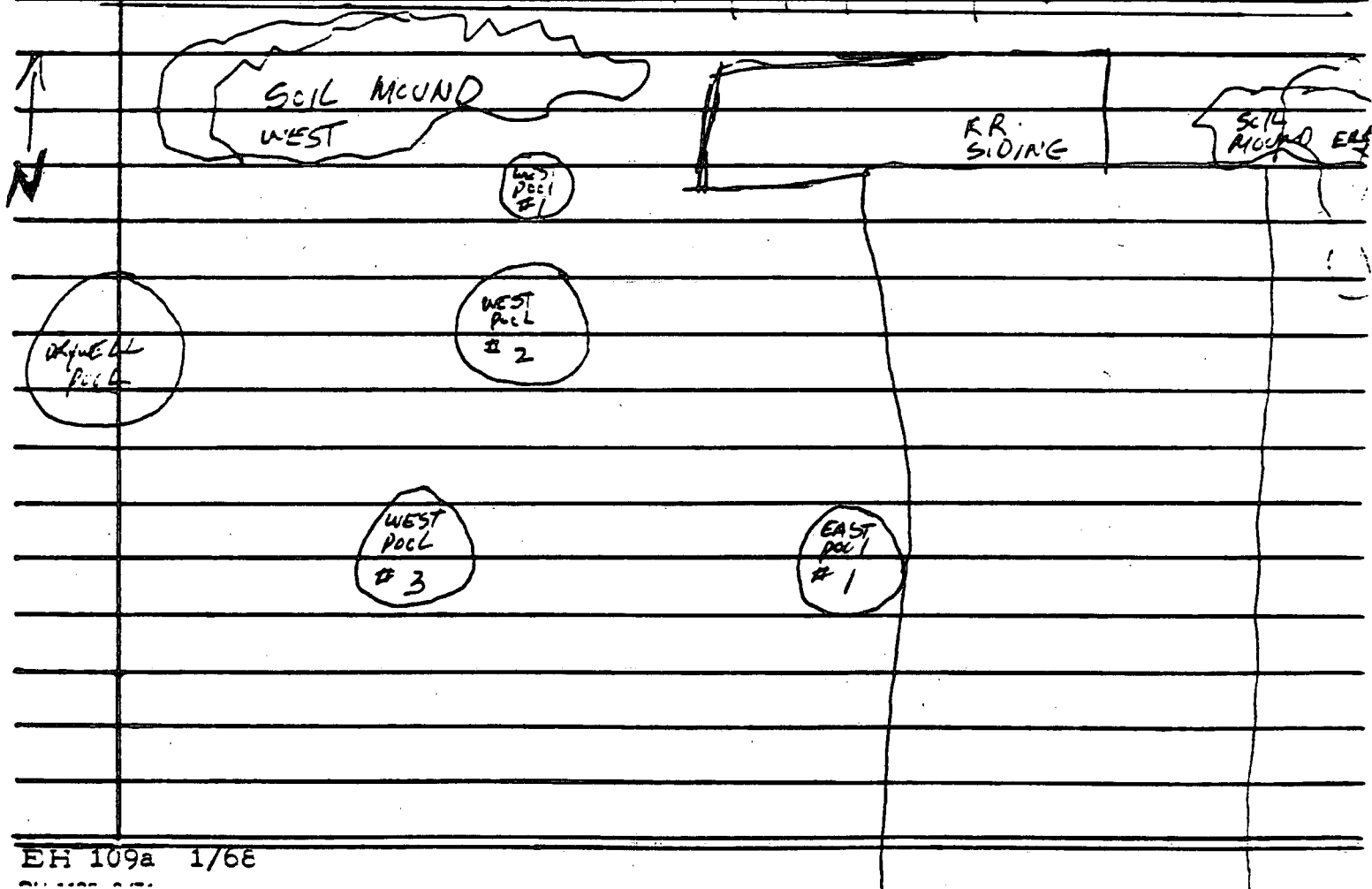
DATE

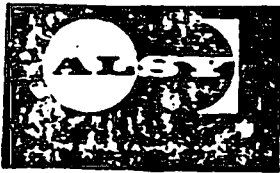
COMMENTS

4/4/85

Ronan Iyer had to leave, he left samples to be taken by employee of Alsey in the presence of John Cassaburi and myself. No representative from DEC arrived. Sampling started about 10:45 A.M. Alsey employee was to take samples to H&M lab on Rt 118. Al Skudel (owner) stated he received order from DEC to pump all pools dry and remove top soil within 5 days. H&M was sampling to determine how the water and soil was to be disposed.

R.R.





Appendix 1.1-29
ALSY MFG. INC.
NEW YORK SHEDDING
11 EAST 20th STREET
NEW YORK, N.Y. 10003
(212) 697-1512

RECEIVED

April 19, 1985

New York State Dept. of Environmental Conservation
Region I Office
Building 40
SUNY at Stony Brook
Stony Brook, New York 11794

RE: Abatement Order

ATTN: Ms. Joan Scherb

Ms. Scherb;

Pursuant to the Commissioner's Summary Abatement Order, Alsy Manufacturing, Inc. has taken the following actions to comply with this order:

- I. Alsy has installed a new pre-treatment system and has received permission to discharge its industrial waste into the Nassau County Sewer System. All authorized discharge outlets have been sealed and discharge of industrial waste into any underground tanks (cesspools, leaching pools, etc.) has ceased.

All of the unauthorized discharge outlets listed in the Commissioner's Abatement Summary paragraph five (5), page three (3) have been permanently removed inside the building and sealed up such that discharge through these outlets is no longer possible.

- II. Alsy has already had samples of its underground tanks (cesspools, leaching pools, etc.) taken and analyzed by Holzmacher, McLendon and Murrel (H2M) Consulting Engineers to determine what measures must be taken to remove the contents from the said tanks.
- III. Alsy has contracted a licensed professional engineer, Soil Mechanics Drilling Corp., to drill borings for soil samples and install sampling wells for water analysis as per specifications approved by the Nassau County Health Dept..

Pending the results of the sample analyses, Alsy will then make arrangements for the contracting of a licensed hazardous waste transporter to insure proper removal, transport and disposal of all soils necessary.

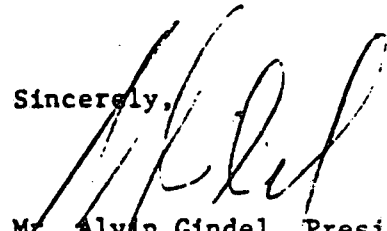


ALSY MFG. INC.
NEW YORK SHOW ROOM
15 EAST 26TH STREET
NEW YORK, N.Y. 10010
(212) 725-1100

Please find the results of the analysis conducted by Holzmacher, McLendon and Murrel (H2M) as per your consent order dated April 4, 1985. According to analysis that we have sent you, we are awaiting your permission to remove.

If you have any questions or require any further information please contact myself or Mr. John Casaburri at (516)822-5252. Thank You.

Sincerely,



Mr. Alvin Gindel, President
Alsy Manufacturing, Inc.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

PROJECT NO. ALSY 83-01

COLLECTED BY RRI 03
DATE RECEIVED - 4/12/85

LAB NO.	SAMPLE ID INFORMATION	SELENIUM	SILVER	ALUMINUM	NICKEL	COPPER	ZINC
554H15	FIRST PILE N.W.	<20.0	<0.02	1.90	6.57	1.07	2.66
554H16	PILE #2 EAST	<20.0	<0.02	<0.20	<0.02	0.04	0.30

DATE REPORTED 4/18/85

A m. Al



NASSAU COUNTY
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

BOARD OF HEALTH

BRUCE A. LISTER
CHAIRMAN
NORMA J. HENRIKSEN
VICE CHAIRMAN
LAWRENCE RAVICH, M.D.
SAMUEL M. GELFAND, M.D.
JOAN L. CAEMMERER

JOHN J. DOWLING, M.D., M.P.H.
COMMISSIONER

May 1, 1984

Harold D. Berger, Director
Region I - New York State
Department of Environmental Conservation
SUNY - Building 40
Stony Brook, New York 11794

Received from:
Nassau Co. Dept. of Health

Re: Alsy Mfg. Co., Hicksville, N.Y.
Violation of SPDES Permit NY0102539

Dear Mr. Berger:

On February 21, 22 and 27, 1984 NYSDEC and NCHD inspectors observed Alsy Manufacturing Company in Hicksville discharging industrial wastewater from points not covered in their SPDES Permit. Four unpermitted discharge points were noted as well as possible contamination of the ground by chemical wastes including paint.

As a result, this matter is being referred for appropriate legal action. Details of our inspections are provided in the attached "Data Supporting Request for Legal Action."

If you have any questions, please contact our Bureau of Land Resources Management at 535-2406.

Sincerely yours,

A handwritten signature in cursive script that reads "John J. Dowling, M.D.".

John J. Dowling, M.D., M.P.H.
Commissioner

JJD:HS:sp

cc: R. Cacciatore, Commerce & Industry
Denis Dillon, NCDA (w/enc.)
G. Cusick, Hicksville W.D.
J. Ehrenfeld, Alsy Mfg. Co.



NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

FRANCIS T. PURCELL
County Executive

Appendix 1.1-24
JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

September 27, 1984

Dennis W. Cole
New York State Department
of Environmental Conservation
SUNY, Building 40 - Room 219
Stony Brook, N.Y. 11794

Re: Alsy Mfg. Co.
SPDES NY 0102539

Dear Mr. Cole:

This office has reviewed the draft renewal SPDES Permit for this facility.

We object to the renewal of this permit for the following reasons:

1. Alsy is currently in violation of the following regulation - ECL 17-0803; ECL 17-0505; ECL 17-0501; Part II Sec. 5 & 9 of the SPDES Permit. These violations were outlined in a proposed consent order on July 20, 1984 by A. Yerman.
2. The draft renewal does not address these existing violations.
3. Public sewers are available for this discharge. Alsy is required by the Nassau County Public Health Ordinance to connect the discharge to the sewer by May 1985. We feel that any permit issued in this situation should not run beyond the mandatory sewer connection date. This was recently done in the case of Depew Mfg. Co., also in Hicksville.

Please contact this office at 535-2406 if you require additional information.

Very truly yours,

Howard Schaefer
Howard Schaefer
Bureau of Land Resources
Management

HS:no

CC: G. Robin, NYSDEC

New York State Department of Environmental Conservation

MEMORANDUM

TO: John E. Iannotti, Supervisor, Eastern Remedial Section
FROM: Richard G. Torrey, Eastern Remedial Section
SUBJECT: ALSY, Hicksville, Long Island, Region 1
DATE: May 29, 1985

Received from
NYSDEC Region 1

This memo will bring you up to date on the above facility. We have discussed some of the items verbally.

On May 1, 1985 I attended a meeting on ALSY at the request of Phil Barbato, Region 1, Water Engineer. This meeting was held at the Nassau County Health Department Offices in Mineola. The subject of the meeting was the Summary Abatement Order for the facility, (a list of attendees is attached) and how it would be handled. After discussion, four points were agreed on:

1. The pits could be pumped through ALSY's new pretreatment facility.
2. A joint inspection would be held May 2nd⁷ to check the corrections required inside the buildings.
3. Rocky Piaggione of DEE, White Plains Office, would contact the AG's Office and request no action on their part against the site at this time.
4. The Department (DEC) would sample the soil and other leaching pits on site for E.P. Toxicity, total phenols, volatile, heavy metal, and any other contaminant found at the site in previous samples.

In addition to the above, I am to coordinate with all parties, the coverage at the site during any remedial action.

On May 2nd the joint inspection of the facility took place. Bill O'Brien, Region 1, conducted this as he was familiar with the discharge points. It appeared all illegal discharges had been eliminated.

At Phil's request I asked Jerry Rider to do a joint RCRA inspection of the site.

The points to be sampled were located today also. The sampling was conducted on May 8th, with Terri Gerrish of DEE, White Plains, and Bill O'Brien assisting. There were six (6) water samples, and eight (8) soil samples obtained and shipped to Erco Labs in Mass. A chain of custody was used and the samples were split with H₂M, ALSY's representative.

Received from
RISULC Region 1

The week of May 20th, three (3) leaching pits (W1, W2, W3) and one catch basin were pumped out and treated in the ALSY pretreatment plant.

On May 22nd, I found leaching pits, pits W-2 and W3, with large amounts of water in them which would necessitate pumping them out again.

It was decided to test the roof drains with dye and water to determine if the water in these pits came from the heavy rain on May 21st. A roof drain from the old building was found to be still connected to the pits. The line from the building to the pits was dug up, cut off and plugged.

The pumping and treatment of the leaching pits was finished on May 25th.

Removal of the pits and contaminated soil will start when the sample results are received. I will coordinate this with the Region and NCHD.

Attachment

RGT:ks

cc: P. Barbato, Region 1

B. O'Brien, Region 1

Ted Sanford, Region 1

SAMPLES COLLECTED BY NYSDEC
at Alsy Mfg. Co., 270 Duffy Ave.
Hicksville on February 21, 1984

<u>Sample Number</u>	<u>Location</u>	<u>Constituents Found</u>
E-184-207-01	First Industrial Leaching Pool Received from: Nassau Co. Dept. of Health	1,1 Dichloroethane 1,1,1 Trichloroethane Toluene Ethylbenzene Copper Lead Nickel Zinc
E-184-207-02	Plating Line Overflow	1,1 Dichloroethane 1,1,1 Trichloroethane Toluene Ethylbenzene Arsenic Copper Lead Nickel Zinc
E-184-207-03	Second Industrial Leaching Pool	Copper Lead Nickel
E-184-207-04	Sanitary Leaching Pool	Lead Toluene
E-184-207-05	Ditch Near Paint Shop	Toluene Ethylbenzene
E-184-207-06	Paint Shop Discharge	Methylene Chloride
E-184-207-07	Pipe on West Side of Cycle II	Cadmium Chromium Lead
E-184-207-08	Pipe on North Side of Cycle II	Cadmium Chromium Lead

On February 22, 1984, we returned to the site and went around the north side of the building and took several pictures, all discharges were as on the previous day. When we were near the paint area we were discovered by a plant employee. We then left the site. We meet Robert Willis of the NCDH in front of the building and entered the plant for an inspection. Mr Ehrenfeld took us through the plant. We traced the pipe we previously were told was a roof drain to the area between the plating tanks and the wall. Mr. Ehrenfeld denied telling us it was a roof drain and stated it was an overflow from the trough surrounding the plating area. He also stated it came from a submersible pump in the trough and was treated before discharge. However, this did not seem possible as the pipe appears to simply go from the pump in the trough up to the roof, along the rafters and out the north wall. We then took Mr. Ehrenfeld out and showed him what we had found outside the previous day.

The pipe from the plating area was not discharging. The double pipes on the west wall showed a whitish liquid discharge from one pipe. He stated that these other discharges were from the area occupied by the Cycle II Division. He then took us into this area and introduced us to Joseph Stevens who is Vice President of the Cycle II Division. Mr. Stevens took us through his area. The pipes with the whitish material below them all appear to be hooked into two sinks, which are used to clean up rags and the workers' hands in an area where brass is used to decorate lamp bases. We were told the reason these discharges simply went through the wall, was that they were told to do so previously by a consulting engineer. The small pipe coming out the window discharging hot water is a bleed from the heating system. The pipe discharging in the paint area is also a drain from two sinks in a paint shop, but it was not made clear to us what is washed. At the time we made the inspection they were washing glass bases for lamps with soap and water. When showed the mess outside the paint shop and the waste paint drums, Mr. Stevens said the mess would be cleaned up and told a worker to cap the drums. At this time we had noticed that someone tried to clean up the excess paint which was on the ground 20 minutes prior to this point. Mr. Stevens claimed to have no knowledge of who tried to clean up the paint mess, and he also stated he had no idea the leaching pool was overflowing or who dug the trench. However, he did confirm it was sanitary waste. Mr. Ehrenfeld then showed us an area on the south side of the building where waste is stored until removed by a scavenger. The area was not bermed, some drums were in a fenced enclosure, while others were not. Most of the approximately 10-12 drums appeared to be properly labeled. We were told that spills occur monthly (Do they need a Part 360 Permit?) The area of the drum storage showed a greenish stain on the asphalt of a copper as nickle oxide color and several stains of varying colors which appeared to be recent. There was another heating system bleed in this area, but the puddle below it was of an opaque, light green color as described above.

Subsequently a discussion was held with Mr. Ehrenfeld and Mr. Stevens in which the following was pointed out that:

1. The overflowing cesspool must be stopped and corrected.
2. The paint waste should not be poured on the ground and that the drums must be kept covered. It was also pointed out that the area should be bermed. When questioned as to how these drums were removed to the drum storage area without spilling, Mr. Stevens stated he didn't know. The drums had two 3 to 4" holes cut in the top and were filled to within a couple of inches of the top.
3. The sink drains could not simply run through a wall and discharge on the ground. They had to be properly connected to a leaching pool.

After leaving Mr. Ehrenfeld and Mr. Stevens, we went back to the north side of the building with Mr. Willis and took further photographs.

On February 24, 1984 we returned to the site to observe if any progress had been made and to take additional photographs. Mr. Ehrenfeld told us that the overflowing sanitary pool had been pumped out and that he had contracted for the installation of a second pool. He also stated that he was taking bids for either connecting the plating shop overflow to the existing SPDES pools or adding another pool. When questioned about the treatment of the plating discharge, Mr. Ehrenfeld stated that the discharge was treated in tanks in the plating area before it entered the trough in the floor.

We then went around back and observed discharge from the pipe from the plating area. It appeared that a truck had been driven across the back yard to the area of the overflowing sanitary pool. The cover of the sanitary pool was now under water, and the well defined ditch of the previous days had been obliterated. There was now a large irregularly shaped flooded area on the north side of the building. It appeared that the sanitary pool was still overflowing as bubbles were rising from the partially ajar lid, but it could not positively be determined if it was the source of the water as it had rained the previous night and was still raining while we were there. The ditch itself was partially filled in down to the area of the paint shop. The pipe from the paint shop was still discharging. The ditch from this pipe north to the main ditch was still flooded and was approximately four feet of the main ditch east of this. Beyond this point, the main ditch was filled in, and concrete rubble had been used to block it at the top of the embankment above the railroad siding.

Plate 1A West

WATER TABLE ON LONG ISLAND, NEW YORK, MARCH 1979

by

Cynthia D. Donaldson and Edward J. Koszalka

Each year the hydrologic situation on Long Island is reviewed as new water-level data are obtained. March 1979 water-level measurements from 564 wells across the island were used to prepare this map. Measurements were made by the wetted tape method to the nearest hundredth of a foot. The water-table configuration has changed little since 1975 (Nakao and Erlichman, 1978) except for increases as great as 5 feet in central Nassau County and 9 feet in central Suffolk County.

The general configuration of the water table is an east-west mound that coincides with the glacial moraine along the center of the island, with an isolated high in central Nassau County and another in central Suffolk County. Northwestern Nassau County and the central part of the southern peninsula of eastern Suffolk County also have local highs. These highs are a product of the low hydraulic conductivity of the geologic units. The lowest recorded water level on the island in March 1979 was a depression in eastern Queens County at 4 feet below the National Geodetic Vertical Datum of 1929 (mean sea level); the highest recorded water level was 91 feet above the datum in central Nassau County. The 100-foot contour in northwest Nassau County represents the probable water level around the site of an abandoned well that consistently had water levels in excess of 115 feet above the datum.

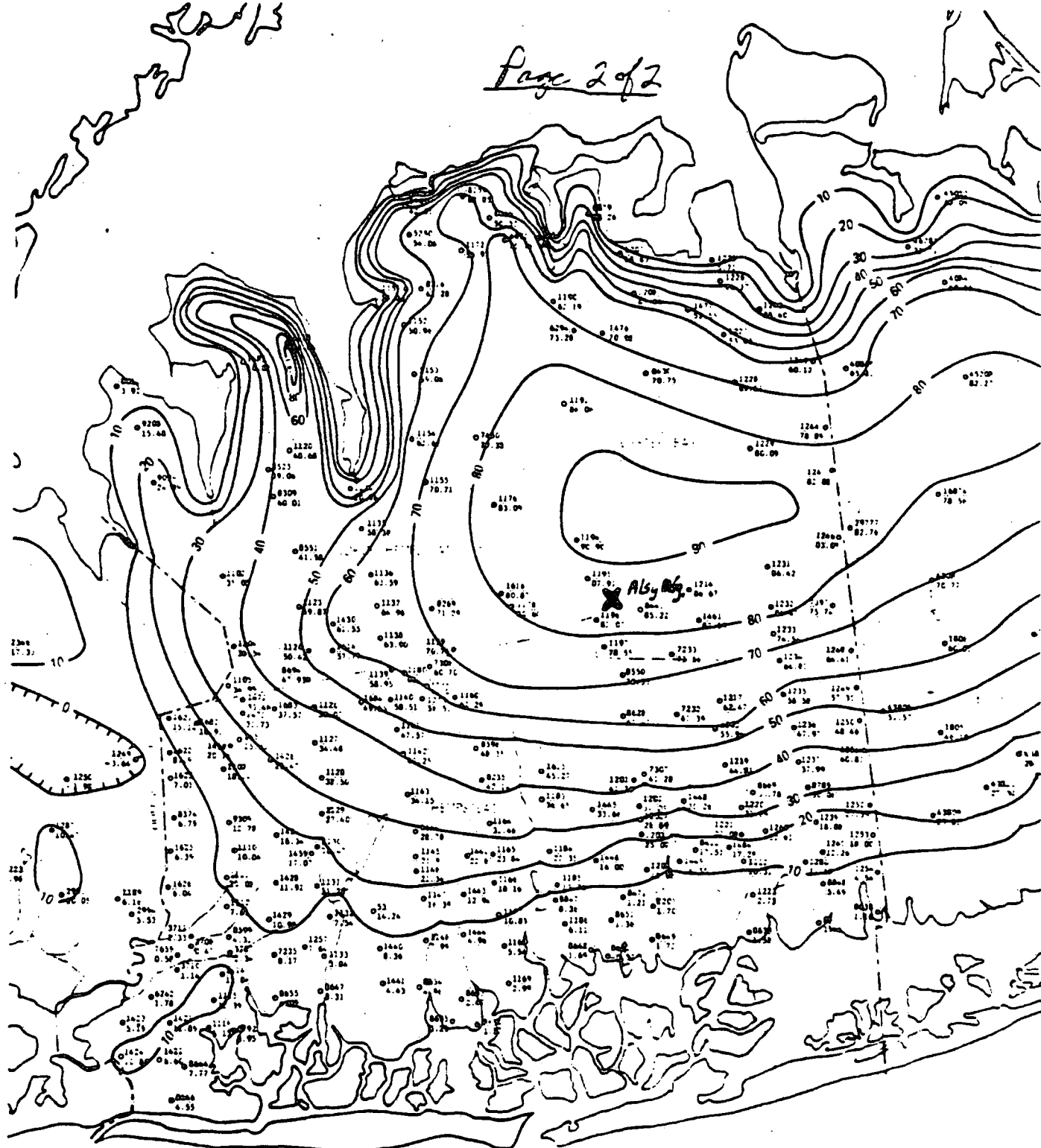
This study was done in cooperation with the Nassau County Department of Public Works, Suffolk County Department of Health Services, Suffolk County Water Authority, and the New York State Department of Environmental Conservation.

REFERENCES

Donaldson, C. D., and Koszalka, E. J., 1982a, Potentiometric surface of the Magothy aquifer, Long Island, New York, in March 1979: U.S. Geological Survey Open-File Report 82-160, 2 sheets.

_____, 1982b, Potentiometric surface of the Lloyd aquifer, Long Island, New York, in January 1979: U.S. Geological Survey Open-File Report 82-162, 2 sheets.

Nakao, J. H., and Erlichman, F. R., 1978, The water table on Long Island, New York, in March 1975: U.S. Geological Survey Open-File Report 78-569, 10 p.



EXPLANATION

○
S. 44

Observation well and number. Prefixes K, Q, N, and S for Kings, Queens, Nassau, and Suffolk Counties, respectively are not shown. Lower number is altitude of potentiometric surface, in feet above or below (-) MVD of 1929.

— 10 —

Contour on the water. Contour interval 10 and 20 feet. Barbures indicate depressions.

OCEAN

ATLANTIC

WATER TABLE ON LONG ISLAND, NEW YORK, MARCH 1979





HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS, ENVIRONMENTAL SCIENTISTS and PLANNERS

125 BAYLIS ROAD, SUITE 140, MELVILLE, N.Y. 11747 • 516-752-9060

July 18, 1984

Mr. Howard Schaefer
Bureau of Land Resources Management
Nassau County Department of Health
240 Old Country Road
Mineola, New York 11501

Re: Alsy Manufacturing, Inc.
Hicksville, New York

Dear Mr. Schaefer:

On behalf of Alsy Manufacturing, Inc., we transmit herewith two (2) copies of our engineering report entitled "Engineering Study and Report - Industrial Wastewater Collection, Treatment and Disposal" for your review.

The report, which has been prepared in accordance with your request, discusses the existing wastewater treatment operations at Alsy Manufacturing, and presents various recommendations for modifications and improvements to the wastewater treatment system. Implementation of the recommendations would enable Alsy Manufacturing, Inc. to meet all groundwater discharge standards, in compliance with the State Pollution Discharge Elimination System (SPDES) permit.

Alsy Manufacturing is in the process of implementing the various recommendations presented in this report. It is anticipated that the modifications to the wastewater treatment system will be completed by August 31, 1984.

Should you have any questions or comments regarding this report, please contact our office.

Very truly yours,

HOLZMACHER, McLENDON & MURRELL, P.C.

Raman S. Iyer

RSI:mad
Enclosures

cc: Mr. Larry Kreisler (Alsy Mfg., Inc.)
Mr. Al Gindel (Alsy Mfg., Inc.)

ENGINEERING STUDY AND REPORT
INDUSTRIAL WASTEWATER COLLECTION,
TREATMENT AND DISPOSAL

ALSY MANUFACTURING, INC.
HICKSVILLE, NEW YORK

MAY 1984

SCOPE

This study and report has been authorized by Alsy Manufacturing, Inc., at the request of the Nassau County Department of Health, to study the industrial wastewater collection, treatment and disposal methods at the Alsy Manufacturing facility in Hicksville, New York. This report presents recommendations for improvements/modifications at the existing wastewater treatment system to enable Alsy Manufacturing, Inc. to meet all groundwater discharge standards, in compliance with their State Pollution Discharge Elimination System (SPDES) Permit.

This report has been divided into four sections. They are:

1. Existing Conditions
2. Wastewater Monitoring
3. Conclusions
4. Recommendations

1.0 EXISTING CONDITIONS

The metal finishing operations at Alsy Manufacturing are the major sources of industrial wastewater which requires treatment prior to discharge. The metal finishing operations include: Alkali and Acid Cleaning, Brass Plating, Nickel Plating and several rinses. See Table 1, "Existing Conditions - Wastewater Generation and Disposal."

Current industrial wastewater discharges from Alsy Manufacturing average 24 gallons per minute (gpm), or 11,500 gallons per day (gpd), based on 8 hours of operation/day. Out of this, 10 gpm or 5,000 gpd of rinse water containing cyanide, copper, zinc and nickel (generated from tanks 14, 15, 21, 24 and 25), are treated in the existing wastewater treatment system and discharged into the ground via on-site industrial wastewater leaching pools. This discharge is permitted under a SPDES Permit (No. NY 0102539), issued by the New York State Department of Environmental Conservation (NYSDEC). Wastewater from tanks 3, 5, 6, 8, 9 and 28, which are primarily rinse waters from cleaning operations, bypass the treatment system and are discharged via on-site storm water leaching pools.

The existing wastewater treatment system at Alsy involves cyanide destruction, metal precipitation, coagulation and flocculation, gravity settling and pH adjustment.

Wastewaters from rinse tanks 14, 15, 21, 24 and 25 are discharged to a collection tank where sodium hypochlorite (NaOCl) is

TABLE 1
(Alsy Manufacturing, Inc.)

EXISTING CONDITIONS - WASTEWATER GENERATION & DISCHARGE

May 1984

<u>TANK NO</u>	<u>PROCESS</u>	<u>TANK CONTENTS</u>	<u>TANK VOLUME gals.</u>	<u>RINSE WATER FLOW gpm</u>	<u>WASTE FLOW qpd</u>	<u>DISCHARGE POINT</u>
1	Cleaning	Alkaline Soak Cleaner	475	-	-	No Discharge
2	Cleaning	Alkaline Soak Cleaner	600	-	-	No Discharge
3	Rinse	Continuous Water Rinse	-	2	960	Stormwater Leaching Pools
4	Cleaning	Alkaline Electro Cleaner	600	-	-	No Discharge
5	Rinse	Continuous Water Rinse	-	3	1440	Stormwater Leaching Pools
6	Rinse	Continuous Water Rinse	-	2	900	Stormwater Leaching Pools
7	Cleaning	Acid (10% Hcl) Cleaner	600	-	-	No Discharge
8	Rinse	Continuous Water Rinse	-	2	960	Stormwater Leaching Pools
9	Rinse	Continuous Water Rinse	-	3	1440	Stormwater Leaching Pools

<u>TANK NO.</u>	<u>PROCESS</u>	<u>TANKS CONTENTS</u>	<u>TANK VOLUME</u> gals.	<u>RINSE WATER FLOW</u> gpm	<u>WASTE FLOW</u> gpd	<u>DISCHARGE POINT</u>
10	Brass Plating	Copper Cyanide	1200	-	-	No Discharge
11	Brass Plating	Zinc Cyanide	"	-	-	No Discharge
		Sodium Cyanide	1200	-	-	No Discharge
12	Brass Plating	Ammonia & Brass Additive	1200	-	-	No Discharge*
13	Rinse	Static Water Rinse	600	-	-	No Discharge*
14	Rinse	Continuous Water Rinse	-	2	960	WWT and Industrial Leaching Pools
15	Rinse	Continuous Water Rinse	-	2	960	WWT and Industrial Leaching Pools
16	Electro Black	Electro Black	425	-	-	No Discharge
17	Rinse	Continuous Water Rinse	-	-	-	No Discharge
18	Anti-Corrosion Bath	Anti-Corrosion Solution	600	-	-	No Discharge
19	Nickel Plating	Nickel Sulfate, Nickel Chloride Boric Acid Brighteners & Additives	1200	-	-	No Discharge
20	Rinse	Static water Rinse	600	-	-	No Discharge*
21	Rinse	Continuous Water Rinse	-	2	960	WWT and Industrial Leaching Pools

<u>TANK NO.</u>	<u>PROCESS</u>	<u>TANKS CONTENTS</u>	<u>TANK VOLUME</u> gals.	<u>RINSE WATER FLOW</u> gpm	<u>WASTE FLOW</u> gpd	<u>DISCHARGE POINT</u>
22	Brass Plating	Copper Cyanide Zinc Cyanide Sodium Cyanide & Brass Additive	600	-	-	No Discharge
23	Rinse	Static Water Rinse	-	-	-	No Discharge*
24	Rinse	Continuous Hot Water Rinse	-	2	960	WWT and Industrial Leaching Pools
25	Rinse	Continuous Water Rinse	-	2	960	WWT and Industrial Leaching Pools
26	Cleaning	Acetic Acid	200	-	-	No Discharge
27	Anti-Corrosion Bath	Anti-Corrosion Solution	200	-	-	No Discharge
28	Rinse	Continuous Water Rinse	-	1	480	Stormwater Leaching Pools
29	Cleaner	Water-Lacquer Mixture	200	-	-	No Discharge
30	Paint Dip	Paint	200	-	-	No Discharge

*Static rinse water is used to make up process baths.

added. There are no controls for the addition of sodium hypochlorite. The chemical is fed at a constant rate using a metering pump. Agitation in the collection tank is accomplished by a mechanical mixer. From the collection tank, wastewater flows by gravity to the cyanide destruction tank where caustic soda (NaOH) is added by means of a metering pump. The addition of caustic soda is controlled by a pH controller which is set to maintain a pH above 10.5. However, the operators of the treatment system indicated that the wastewater coming into the cyanide destruction tank is generally above pH 11.0. This is apparently due to the addition of sodium hypochlorite in the collection tank. Alum (aluminum sulfate) is also added at the cyanide destruction tank. Alum is fed at a constant rate using a metering pump.

From the cyanide destruction tank, the wastewater flows by gravity to a collection sump, and pumped at approximately 20-25 gpm through a flocculation tank. The flocculation tank is baffled and equipped with slow speed flocculator paddles in its first compartment. A polyelectrolyte solution is added in the first compartment using a metering pump. At the time of this study, the metering pump was not functioning and polyelectrolyte was added manually.

From the flocculating tank, the wastewater flows by gravity to the gravity settling tank which is a compartmentalized square tank (5'x5') with a conical bottom. Sludge settles at the conical bottom. A sludge draw-off pump is provided at the bottom of the settler to remove the sludge. During this review, it was

Results of the monitoring program are presented in Table 2. Because the municipal sewers are currently available for discharge, the results are compared both to SPDES effluent limits and Nassau County sewer discharge standards.

From Table 2, it can be seen that the treated wastewater failed to meet the groundwater discharge standards for aluminum, copper, cyanide, total dissolved solids and total nitrogen. If the treated wastewater was discharged into the Nassau County sewer system, it would have exceeded the discharge standards for aluminum, copper, zinc and cyanide.

The wastewater effluent samples were also analyzed for various volatile halogenated and volatile non-halogenated organics. The results, as shown in Lab Reports 452276, 452277, 452278 and 452279, indicate no appreciable quantities of volatile halogenated or non-halogenated organics.

3.0 CONCLUSIONS

Based on the results of the monitoring program and our evaluation of the treatment system operations, the following conclusions are drawn regarding the performance of the existing wastewater treatment system with respect to meeting the current discharge standards:

Aluminum: It is interesting to note that although aluminum was not detected in the influent to the wastewater treatment system, the effluent shows aluminum concentrations of 13-15 mg/l. This is primarily due to the alum (aluminum sulfate) added in the treatment system.

TABLE - 2

ALSY MANUFACTURING, INC.

MAY 1984

WASTEWATER MONITORING STUDY RESULTS

DATE	SAMPLE I.D.	Al	Ar	Cu	Fe	Pb	Ni	Zn	CN	TDS	pH	TOT-N	TKN	NH ₃ -N	NO ₃ -N	NO ₂ -N	Oil & Grease	MBAS
	SPDES Stds. (mg/l)	2.0	0.05	1.0	0.60	0.05	2.0	5.0	0.40	1000	6.5-8.5 Units	10.0	--	--	--	--	15.0	1.0
	Nassau County Sewer Stds.(mg/l)	2.0	0.10	0.40	4.0	0.10	2.0	0.6	0.80	--	5.5-9.5 Units	--	--	--	--	--	100.0	--
2/8/84	Influent (6hr. composite)	<0.2	85 ppb	32.0	0.08	4.0 ppb	3.17	4.85	51.0	254	7.4	--	--	--	--	--	--	--
2/8/84	Effluent (6hr. composite)	<u>13.5</u>	39 ppb	<u>7.4</u>	0.25	<2.0 ppb	0.97	1.45	0.10	<u>1860</u>	6.9	--	--	--	--	--	--	--
2/9/84	Influent (6hr. composite)	<0.2	58 ppb	42.0	0.10	9.0 ppb	9.39	5.82	66.0	323	7.4	31.0	27.0	5.4	4.0	--	--	--
2/9/84	Effluent (6hr. composite)	<u>14.3</u>	23 ppb	<u>9.42</u>	0.16	<4.0 ppb	1.92	1.06	<u>5.86</u>	<u>1650</u>	7.1	<u>21.0</u>	17.3	14.9	3.7	--	--	--
2/8/84	Rinse Water (6hr. composite)	--	--	--	--	--	--	--	--	--	--	<u>12.5</u>	8.6	2.4	3.9	<0.10	--	0.69
2/9/84	Rinse Water (6hr. composite)	--	--	--	--	--	--	--	--	--	--	6.2	3.0	1.5	3.2	<0.10	--	<0.04
3/15/84	Rinse Water (4hr. composite)	0.2	<2 ppb	0.46	<u>1.90</u>	<u>112</u> ppb	0.30	0.61	0.10	217	7.4	--	--	--	--	--	<5.0	<0.04
3/16/84	Rinse Water (6hr. composite)	0.2	<2 ppb	0.37	<u>0.98</u>	<u>47.5</u> ppb	0.30	0.42	0.15	171	7.6	0.13	--	--	--	--	--	0.13

(1) All results are presented in mg/l (ppm) unless otherwise noted.

(2) Effluent samples which exceeded SPDES discharge standards are underlined.

Copper: Presently, the treatment system is able to remove approximately 77 percent of the copper in the influent wastewater. However, it still fails to meet both the groundwater and Nassau County sewer discharge standards. Copper precipitates out as copper hydroxide at pH 9.2. The insufficient removal of copper can be attributed to:

- a) Improper pH condition in the precipitation tank.
- b) Insufficient addition of polyelectrolyte caused by a malfunction of the metering pump.
- c) Hydraulic overloading of the gravity settler caused by intermittently pumping excessive volumes of wastewater.
- d) Insufficient removal of sludge from the gravity settler.

Cyanide: The monitoring data presented in Table 2 for 2/8/84 shows that the existing wastewater treatment system is capable of treating cyanide wastes to meet both SPDES and Nassau County sewer discharge standards. However, on 2/9/84 the treated wastewater failed to meet the discharge standards.

Cyanide is best destroyed in two steps. The first step is the oxidation of cyanide (CN) to less toxic cyanate (CNO) by the alkaline chlorination (achieved by adding sodium hypochlorite) at pH 10.5. The second step is the oxidation of cyanate to nitrogen (N₂) and carbon dioxide (CO₂) by alkaline chlorination at pH 8.0 or with increased retention time at pH 9-9.5.

The failure of the existing treatment system to meet the discharge standards for cyanide can be attributed to:

- a) Improper addition and control of sodium hypochlorite.
- b) Improper pH conditions.
- c) Hydraulic overloading of the system.

Zinc: The concentration of zinc in the treated wastewater is within the current SPDES discharge standards. However, it will fail to meet the more stringent Nassau County sewer discharge standard of 0.6 mg/l.

Zinc can be precipitated as zinc hydroxide at pH 9.4.

Total Dissolved Solids and Total Nitrogen: As shown in Table 2, the concentration of total dissolved solids in the treated effluent is higher than the influent. This is primarily due to the by-products of the chemical waste treatment which forms water soluble salts (e.g., the addition of sodium hypochlorite generates sodium chloride salt).

Total nitrogen is caused by the addition of ammonia in some of the process baths (e.g., ammonia is added to the brass plating bath).

Since the relatively clean rinse waters from the cleaner operations contain very little TDS and total nitrogen, the combined discharge of cleaner rinse waters and treated plating rinse waters should meet discharge standards for both contaminants.

4.0 RECOMMENDATIONS

So as to meet the current SPDES and Nassau County sewer discharge standards, the existing wastewater treatment system requires certain modifications. These recommended modifications are discussed below:

(a) In order to reduce the hydraulic overloading of the wastewater treatment systems, rinse water flow rates at rinse tanks 14, 15, 21, 24 and 25 should be reduced by adding flow restrictors at each tank. Rinse water flow rates at the first stage rinse tanks (14, 21 and 24) should be reduced from 2.0 to 1.5 GPM. Rinse water flow rates at the second stage rinse tanks (15 and 25) should be reduced from 2.0 to 1.0 GPM. Rinse water flow rates at rinse tank 28 can remain at 1.0 GPM. This will reduce the total rinse water flow from the plating operations to 7.5 GPM (3600 gpd), resulting in an overall flow reduction of approximately 30 percent at the treatment system.

If the quality of the finished product is adversely affected by the reduction in the rinse water flow, multi-stage counter-current rinse stations should be considered. If multi-stage countercurrent rinse stations cannot be installed, the rinse water flow rates may have to be increased to the desired levels. However, the existing wastewater system, especially the gravity settler, may not be able to handle the increased hydraulic loading and will require modifications/replacement.

Rinse water flow rates at the cleaning operations tanks 3, 5, 6, 8 and 9 can be maintained at their present levels.

(b) So that the hydraulic loading of the wastewater treatment system can be better controlled, we recommend that the collection tank be fitted with an automatic transfer pump. The transfer pump will enable the operator to maintain a constant wastewater flow through the system, thereby preventing any hydraulic overloading and making the addition of wastewater treatment chemicals, such as polyelectrolyte, more efficient. The wastewater collection tank should be equipped with high level and low level switches which will activate the transfer pump. The suction and discharge line of the transfer pump should be equipped with suitable sized gate valves.

(c) In order to avoid the formation of toxic cyanogen gas (which may be produced under acidic conditions), the wastewater in the collection tank must be maintained at or above pH 10.5, by adding caustic soda. We recommend that a pH control system be installed at the collection tank to control the addition of caustic soda.

(d) From the collection tank, the wastewater will be transferred to the cyanide destruction tank, where cyanide will be oxidized to cyanate by the addition of 15 percent sodium hypochlorite (NaOCl) at pH 10.5. We recommend that an ORP (Oxidation Reduction Potential) Controller be installed at the cyanide destruction tank to control the addition of sodium hypochlorite. The ORP of the wastewater should be maintained at +250 mv. The addition of NaOCl should bring the wastewater pH to the optimum level, eliminating the need for separate caustic addition. The

pH of the wastewater in this tank should be manually tested periodically using a portable pH meter.

(e) From the cyanide destruction tank, the wastewater will flow by gravity to the precipitation tank. In the first compartment of the precipitation tank, the pH of the wastewater should be maintained between 9.2 and 9.5 by adding sulfuric acid to precipitate the heavy metals, such as copper, nickel and zinc as their respective hydroxides. We recommend that the addition of sulfuric acid be controlled by an automated pH controller. In addition to this, sufficient quantities of sodium hypochlorite should also be added to the precipitation tank to maintain an ORP of +250 mv in the wastewater. Sodium hypochlorite should be added by means of a suitable metering pump. The ORP should be measured periodically using the portable ORP meter. The addition of sodium hypochlorite will oxidize the cyanate (CNO^-) to nitrogen (N_2) and carbon dioxide (CO_2) gases.

(f) We recommend that the polyelectrolyte presently used (Floculite 551) be continued. Polyelectrolyte should be added to the wastewater at the last compartment of the precipitation tank, before the wastewater enters the gravity settler. A suitable mechanical mixer should be installed in this compartment to provide flash-mixing of the polyelectrolyte. We recommend a polymer application rate of 4 mgs per liter of wastewater.

(g) If proper flocculation and settling of solids is not achieved in the gravity settler, then it is recommended that the use of Floculite 551 be discontinued and instead GWP-26-Floculite, which is supplied by the same manufacturer, be used.

(h) In order to properly prepare the polyelectrolyte stock solution, we recommend that a new polyelectrolyte preparation system be installed. This system should consist of a 55-gallon polyethylene tank, equipped with a mechanical mixer and a suitable metering pump to transfer the polyelectrolyte stock solution to the wastewater.

The polyelectrolyte stock solution should be prepared by adding 1 liter of the Floculite 551 to 50 gallons of water. The stock solution should be added continuously to the last compartment of the precipitation tank at an approximate rate of 0.5 gallons/hour.

(i) So as to eliminate the excess aluminum present in the wastewater, we recommend that the addition of alum (aluminum sulfate) in the cyanide destruction tank be discontinued.

(j) The wastewater, after flash mixing with polyelectrolyte, will flow to the gravity settling tank. In order to increase the flocculation of the precipitated particles, we recommend that the flocculating paddles in the precipitation tank be relocated to the first compartment in the gravity settling tank.

The efficiency of a settling tank depends on the hydraulic loading and the sludge removal rates. The hydraulic loading will be controlled by the wastewater transfer pump installed in the collection tank. In order to prevent carryover of sludge in the final wastewater, the sludge settled at the bottom of the settling tank should be removed as frequently as possible, by using the sludge removal pump.

The sludge should be dewatered in the existing sludge dewatering system and accumulated in drums or suitable containers and disposed of off-site by a licensed industrial waste scavenger. The filtrate should be transferred back to the collection tank.

(k) The cleaner rinse waters are presently collected in a sump and discharged by pumping into on-site storm water leaching pools. Since the existing SPDES permit does not allow discharge of wastewater through storm water leaching pools, discontinue this practice and repipe the pump discharge such that it flows into the final neutralization tank. The relatively clean rinse waters from the cleaner operations should not require treatment. Clear wastewater (7.5 GPM) from the gravity settling tank will flow to the final neutralization tank, where it will be mixed with the rinse waters from the cleaner operations (13 GPM). Sulfuric acid (H_2SO_4) should be used to adjust the wastewater's pH to between 7.0 and 8.0. We recommend that a pH control system be installed at the final neutralization tank to control the addition of sulfuric acid. Neutralized effluent should be discharged via the existing industrial wastewater leaching pools.

(l) The existing wastewater treatment tanks are in disrepair and should be cleaned, painted and epoxy coated.

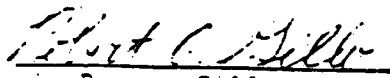
(m) Since the Nassau County sewer system is available, it is recommended that Alsy Manufacturing, Inc. should apply to the Nassau County Department of Public Works for a special sewer discharge permit.

(n) During our study, no information was available regarding the management of various spent process chemistry. It is recommended that spent cleaner solutions, such as alkali and acid cleaners, be collected in holding tanks and fed to the wastewater treatment system on a controlled basis. Other spent process solutions, such as cyanide baths, should be collected in suitable containers such as drums and disposed of off-site via licensed industrial waste scavengers. Proper procedures involved in the disposal of hazardous wastes, such as manifesting, proper containerization of the wastes, labeling of containers, etc., must be followed.

SUMMARY

Upon implementing the recommended modifications to the existing wastewater treatment system, the wastewater discharged from the treatment system (admixture of treated rinse water and the untreated cleaner rinses) should meet the current SPDES and the Nassau County sewer discharge standards.

On the south side of the ditch, at the top of the embankment, it appeared that white paint had been poured on the ground and vegetation. This paint spill had not been observed in previous inspections. The railroad siding area was still flooded. The waste paint drums had been removed from the outside of the paint shop. Sections of pipe that had previously been scattered around the north side of the building were now lined up on the ground from the paint shop discharge pipe to the embankment above the railroad siding. It appeared as if they intend to pipe this discharge to the siding area.


Robert Gillo
Engineering Technician


William O'Brien
Engineering Technician

Facility Name Alsy Manufacturing
 Location Town of Oyster Bay, Nassau County, New York
 EPA Region I
 Person(s) in charge of the facility Mr. Alvin Gindel, President
270 Duffy Avenue
Hicksville, NY 11801
 Name of Reviewer EA Science and Technology Date 25 November 1986
 General description of the facility:
 (For example: landfill, surface impoundment, gas collection system, type of hazardous substances, location of the facility, containment status of major concern, types of information needed by receiving agency, etc.)
Alsy Manufacturing manufactures lamps and lampshades. Operations include
bronze plating, antiquing, electroplating. In 1984, the site was in-
spected by NYSDEC and NCDOH. Many unauthorized discharges were found
and much of the area behind the Alsy building was found to be contam-
inated with heavy metals and volatile organics. Alsy was ordered to
cease all discharges, to clean up contamination, and to begin a remedial
investigation. Although some portions of the site have been cleaned,
Alsy's consent order was never completed. Criminal prosecution is under
way.
 Score $S_V = 32.8$ $S_{FE} = 56.8$ $S_{SC} = 0$ $S_A = 0$)
 $S_{FE} = \text{N/A}$
 $S_{SC} = 62.5$ Maximum $S_M = 37.93$

FIGURE 1
 HRS COVER SHEET



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1. IDENTIFICATION

01 STATE NY 02 SITE NUMBER New

2. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ 2 A GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED 239,300
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Within a 3-mi radius, the aquifer of concern has been developed by 5 Jericho W.D. wells, 20 Hicksville W.D. wells, 2 Plainview W.D. wells, 1 Old Westbury Village W.D. well, 9 Westbury W.D. wells, 2 Bowling Green Estates W.D. wells, and 9 Levittown W.D. wells. In addition, an unknown number of private wells within a 3-mi radius.

01 ☐ 8 SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Although contaminants were discharged to ground surface, there is no viable overland route to surface water due to roads, highways, and recharge basins which intersect the pathway.

01 ☐ C CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported.

01 ☐ D FIRE EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No imminent threat.

01 ☒ E DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED 21,726
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Pollutants were found on the surface behind the Alsy building. The site is not entirely fenced.

01 ☒ F CONTAMINATION OF SOIL unknown
03 AREA POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE Feb 1984 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Samples from soil underneath the illegal discharges from Alsy Cycle II were found to be contaminated with several heavy metals.

01 ☒ G DRINKING WATER CONTAMINATION 235,300
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Limited to the population served by ground water.

01 ☐ H WORKER EXPOSURE TO AIR
03 WORKERS POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported.

01 ☐ I POPULATION EXPOSURE TO AIR
03 POPULATION POTENTIALLY AFFECTED _____
02 ☐ OBSERVED DATE _____ 3. POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known or reported.

Recommendations



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

1. IDENTIFICATION

01 STATE NY 02 SITE NUMBER New

II. WASTE STATES, QUANTITIES AND CHARACTERISTICS

01 PHYSICAL STATES (check all that apply) 01A SOLID 01B POWDER/FINE 01C SLUDGE 01D OTHER 02 WASTE QUANTITY AT SITE 02A VOLUME 02B WEIGHT 02C OTHER 03 WASTE CHARACTERISTICS (check all that apply) 03A TOXIC 03B CORROSIVE 03C RADIOACTIVE 03D REACTIVE 03E SOLUBLE 03F OBTAINABLE 03G FLAMMABLE 03H EXPLOSIVE 03I REACTIVE 03J INCOMPATIBLE 03K NO APPLICABLE
--

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SL	SLUDGE			
OW	OTHER WASTE			
SO	SOLVENTS	unknown		
PE	PESTICIDES			
OC	OTHER ORGANIC CHEMICALS	unknown		
IC	INORGANIC CHEMICALS	unknown		
AC	ACIDS			
BA	BASES			
ME	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (as reported by site owner)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DEPOSITION METHOD	05 CONCENTRATION	06 UNIT OF MEASURE
SOL	Methylene chloride	75-09-2	TK/OD/DR	12,000	mg/liter
SOL	1,1,1-trichloroethane	71-55-6	TK/OD/DR	74,000	ug/liter
SOL	1,1-Dichloroethene	75-34-3	TK/OD/DR	600	ug/liter
SOL	Toluene	108-88-3	TK/OD/DR	18,000	ug/gram
SOL	M-Xylene		TK/OD/DR	12,000	ug/gram
OCC	Ethyl benzene	100-41-4	TK/OD/DR	2,000	ppb
MES	Nickel	7440-02-0	TK/OD/DR	169,000	ug/liter
MES	Chromium	7440-47-3	TK/OD/DR	434	ug/liter
MES	Arsenic	7440-38-2	TK/OD/DR	90	mg/liter
MES	Lead	7439-92-1	TK/OD/DR	120	mg/liter
MES	Cadmium	7440-43-9	TK/OD/DR	0.33	mg/liter
IOC	Cyanide		TK/OD/DR	0.96	mg/liter
MES	Copper		TK/OD/DR	464,000	ug/liter

V. FEEDSTOCKS (as reported by site owner) N/A

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FE			FE		
FE			FE		
FE			FE		
FE			FE		

VI. SOURCES OF INFORMATION (as reported by site owner)

EA Site Inspection, 23 January 1987.

References: 1, Appendixes 1.1-15, 1.1-23, 1.1-29, and 1.4-1.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER New

II. SITE NAME AND LOCATION

03 SITE NAME

Alsy Manufacturing

04 STREET ROUTE OR SPECIFIC LOCATION IDENTIFIER

270-280 Duffy Avenue

05 CITY

Hicksville (Town of Oyster Bay)

06 STATE

NY

07 ZIP CODE

11801

08 COUNTY

Nassau

09 COUNTY CODE

10 ZIP CODE

11 COORDINATES

LATITUDE

40° 45' 42" N

LONGITUDE

73° 31' 52" W

12 TYPE OF OWNER/LEASE

01 PRIVATE 02 FEDERAL

03 OTHER

04 STATE

05 COUNTY

06 MUNICIPAL

07 UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION

1/23/86

02 SITE STATUS

01 ACTIVE

02 INACTIVE

03 YEARS OF OPERATION

1975

present

UNKNOWN

04 AGENCY PERFORMING INSPECTION

01 EPA

02 EPA CONTRACTOR

03 MUNICIPAL

04 MUNICIPAL CONTRACTOR

05 STATE

06 STATE CONTRACTOR

EA Science and Tech.

07 OTHER

01 NAME OF INSPECTOR

James Shultz

02 TITLE

Senior Geologist

03 ORGANIZATION

EA

04 TELEPHONE NO.

914 692-6774

05 OTHER INSPECTOR

Rebecca Ligotino

06 TITLE

Environmental Scientist

07 ORGANIZATION

EA

08 TELEPHONE NO.

914 692-6774

Howard Schaefer

Public Health Sanitarian

NCDOH

516 535-3311

Robert Ellis

Public Health Sanitarian

NCDOH

516 535-2406

IV. SITE REPRESENTATIVE INTERVIEW

01 NAME

Al Gindel

02 TITLE

President

03 ADDRESS

270 Duffy Avenue
Hicksville, New York 11801

04 TELEPHONE NO.

516 822-5252

John Casaburri

Plant Mgr.

280 Duffy Avenue
Hicksville, New York 11801

05 TELEPHONE NO.

01 ACCESS GAINED BY:
02 PERMISSION
03 WARRANT

04 TIME OF INSPECTION

1430

05 WEATHER CONDITIONS

Overcast, cold

V. INFORMATION AVAILABLE FROM

01 CONTACT

Rebecca Ligotino

02 ORGANIZATION

EA Science and Technology

03 TELEPHONE NO.

914 692-6706

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM

Rebecca Ligotino

05 AGENCY

EA

06 ORGANIZATION

EA

07 TELEPHONE NO.

DATE

1/18/87



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

1 IDENTIFICATION
01 STATE NY 02 SITE NUMBER New

II PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A NPDES				
<input type="checkbox"/> B UIC				
<input type="checkbox"/> C AD				
<input type="checkbox"/> D RCRA				
<input type="checkbox"/> E RCRA INTERIM STATUS				
<input type="checkbox"/> F SPCC PLAN				
<input checked="" type="checkbox"/> G STATE SPDES	NY0102539	1977	1984	
<input type="checkbox"/> H LOCAL				
<input type="checkbox"/> I OTHER				
<input type="checkbox"/> J NONE				

III SITE DESCRIPTION

01 STORAGE/ DISPOSAL	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT/ OTHER USE	05 OTHER
<input type="checkbox"/> A SURFACE IMPOUNDMENT			<input type="checkbox"/> A INCINERATION	<input checked="" type="checkbox"/> A BUILDINGS ON SITE
<input type="checkbox"/> B PILES	Unknown		<input type="checkbox"/> B UNDERGROUND INJECTION	
<input checked="" type="checkbox"/> C DRUMS ABOVE GROUND			<input type="checkbox"/> C CHEMICAL PHYSICAL	
<input type="checkbox"/> D TANK ABOVE GROUND	unknown		<input type="checkbox"/> D BIOLOGICAL	
<input checked="" type="checkbox"/> E TANK BELOW GROUND			<input type="checkbox"/> E WASTE OIL PROCESSING	
<input type="checkbox"/> F LANDFILL			<input type="checkbox"/> F SOLVENT RECOVERY	
<input type="checkbox"/> G LANDFARM	unknown		<input type="checkbox"/> G OTHER RECYCLING RECOVERY	
<input checked="" type="checkbox"/> H OPEN DUMP			<input type="checkbox"/> H OTHER	
<input type="checkbox"/> I OTHER				

06 COMMENTS

Alsy Mfg. had a SPDES permit for one sanitary cesspool and one industrial leachpool authorized to receive various metals. Numerous SPDES violations have occurred including: unauthorized point sources, use of sanitary system for discharge of industrial pollutants, discharges above allowable permit limitations, violation of effluent standards, and discharges of unauthorized pollutants, particularly solvents. NYSD

IV CONTAINMENT Inspectors have discovered contaminated soil on the site.

01 CONTAINMENT OF WASTES

☐ A ADEQUATE SECURITY ☐ B MODERATE ☐ C INADEQUATE PROOF ☒ D INSECURE UNSOUND DANGEROUS

02 DESCRIPTION OF DRAIN, DRAIN LINES, BARRIERS, ETC.

Below grade leachpools/cesspools offer no containment with respect to ground water. In addition, wastes were disposed in ground surface.

V ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE BY VEHICLES ☐ A NO

02 COMMENTS

Site is not entirely fenced.

VI SOURCES OF INFORMATION

EA Site Inspection.

References: 1 and 4. Appendix 1.1-2.

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: Alsy Manufacturing

I.D. Number: 130027

Person Contacted: Mr. Alvin Gindel

Date: 23 January 1986

Title: President

Affiliation: Alsy Manufacturing, Inc.

Phone No.: (516) 822-5252

Address: 270 Duffy Avenue
Hicksville, New York 11801

Persons Making Contact:
EA Representatives:

Type of Contact: In Person

Shultz/Ligotino

Interview Summary:

Alsy Manufacturing, Inc. is a metal plating operation that moved in to the building at 270 Duffy Avenue, Hicksville, New York in 1975. Alsy currently leases the building from Lazarus Associates, who recently purchased the property from Balatam Realty. The previous occupant was Laboratory Furniture, Inc. Mr. Gindel indicated that while Alsy does metal plating, they have an extensive pollution control system that takes care of any toxic discharge. They do use trichloroethane, but have it hauled away. Mr. Gindel insists that what started intense investigation into his company's operational procedures was someone throwing soil into the toilet cesspool. Alsy Manufacturing did not use the dry wells on site. In fact, a disconnected pipe discovered while excavating rendered them unusable. These dry wells and most of the cesspools were already in place when Alsy moved in. Alsy had been working with the Nassau County Department of Health (NCDOH) to clean up the cesspools and to install monitoring wells. Monitoring wells had been installed onsite. Soon thereafter, the New York State Department of Environmental Conservation (NYSDEC) got involved. The NYSDEC sampled the cesspools and found a slight chemical contamination in one. The cesspools have all been cleaned. They ordered Alsy Manufacturing, Inc. to dig up suspected and contaminated soil and have it hauled away. They later tested the soil and found nothing. Mr. Gindel insists that what contamination the NYSDEC found has all been cleaned up. Since 1985, Alsy Manufacturing, Inc. is hooked up to the public sewer system. E2M Inc. investigated the plating operation and reported them "clean".

Interview Acknowledgement Form
Page 2

was run from the industrial cesspools to the railroad siding area. He also suggested that the dry wells which currently receive surface runoff may have received industrial wastes, although this was never observed by the NCDOH and cannot be substantiated. The old soil pile was created in 1984 when the surface of the swampy area which had received the SPDES discharge bypass flow was skimmed and the soil piled up. Various stains on the ground surface and colors on the wall near the paint shop area seen by the NCDOH inspectors were caused by discharge from the stripping sinks of Alsy Cycle II. Alsy Cycle II is a separate corporation, but part of the operations at 280 Duffy Avenue. Two stripping sinks discharged at the corner of the building via a 6-in. pipe to the ground. In addition, waste paints stored in the area have been spilled to the ground. Soil sampling done in this area has shown concentrations of lead. A 6-in. PVC pipe coming out of the ground behind the paint shop area is said to be a clean-out pipe for the sanitary pools also in the same location. In May 1985, Alsy Manufacturing hooked up to the public sewer system, and no longer discharges to the various pools on the property.

Mr. Casaburri indicated that the former owner of the property, Balatem, Inc. operated onsite as Metalab, a maker of laboratory furniture.

Acknowledgement:

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to EA Science and Technology interviewers, or as I have revised below, is an accurate account.

Revisions (please write in corrections to above transcript):

Signature: _____

Date: _____

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: Alsy Manufacturing

I.D. Number: 130027

Person Contacted: Mr. John M. Casaburri

Date: 23 January 1986

Title: Plant Manager

Affiliation: Alsy Manufacturing, Inc.

Phone No.: (516) 822-5252

Address: 280 Duffy Avenue
Hicksville, New York 11801

Persons Making Contact:
EA Representatives:

Type of Contact: In Person

Shultz/Ligotino

Interview Summary:

According to Mr. John M. Casaburri, Plant Manager, the investigation of Alsy Manufacturing, Inc. began when the New York State Department of Environmental Conservation (NYSDEC) came to collect a routine sample for the SPDES permit. NYSDEC personnel observed a discharge from a pipe from inside the building to the ground surface. In addition, other pipes were seen coming out of the wall at various spots around the building. NYSDEC notified Nassau County Department of Health (NCDOH) and NCDOH began working with Alsy Manufacturing to evaluate the situation. A monitoring program was worked out with Alsy's consultant, Soil Mechanics, Inc., and certain of the proposed ground-water monitoring wells were installed during the spring of 1985 (wells were of 4-in. PVC construction and installed to first water). However, the NYSDEC disagreed with the monitoring program, and plans for the program stopped. The wells that had been installed were not sampled. The NYSDEC sampled the pools, sediment, and a suspicious dirt pile in the back of the property, and ordered a clean up of the site. Clean up took place, but with no supervision. No post-clean up samples have been taken. E2M, Inc., a consultant for Alsy, sampled at the site just prior to the NYSDEC sampling.

Discharge to the cesspools took place from 1977 to 1985. At times when the cesspools overflowed, wastes were bypassed the SPDES discharge and dumped directly to the ground in the swampy area. It was established during investigations of the site that a cesspool was beneath the swampy pool. An abandoned cesspool is located partially under the building in line with the industrial cesspools. Mr. Casaburri has indicated that wastes were treated with cyanide destruction, metal precipitation, and chlorination before being discharged to the cesspools. Mr. Schaefer, NCDOH, indicated chlorinated solvents have, at times, been identified in the SPDES discharge, but it has never been determined where they were coming from. Mr. Schaefer hypothesized that the chlorinated solvents may have been coming from lacquers used on lamps or perhaps from degreasing machines, however there is no direct connection to the plating line and parts should be dry by the time they reach plating. Mr. Casaburri indicated there is a 275-gallon trichloroethane tank inside the building. He insisted that there is no way solvents could reach the treatment system and solvents are not part of the Alsy discharge. Chlorinated solvents are not treated for by the waste treatment system. Mr. Schaefer indicated that at some point after the problems were discovered at the site an overflow pipe

DATA SUPPORTING REQUEST FOR LEGAL ACTION

Sept 25, 1984

DATE: ~~July 9, 1984~~

FIRM: Alsy Manufacturing Inc.

RESPONSIBLE OFFICER: A. Gindel, President

ADDRESS: 270 Duffy Ave.

Hicksville, NY 11801

1. Specific Violations: ECL 17-0803 - discharging in a manner other than as prescribed by SPDES permit 0102539; ECL 17-0505 - making use of an outlet discharging into the waters of the State without a valid SPDES permit; ECL 17-0501 - discharging in contravention of the groundwater effluent standards and limitations as set forth in 6NYCRR 703.6; violation of Permit Part II, Sec. 9 requirements to submit and obtain approval of an engineering report, plans, and specifications prior to construction of modifications to the waste disposal system; and violations of Permit Part II, Sec. 5 requirement for submittal of non-compliance reports.

this site has just been added to State ~~SPDES~~ Inactive Hazardous Waste list.

2. Background Information: On four separate occasions; (February 21, 22, 24, and 27, 1984) inspections by DEC and/or NCDH showed four unpermitted discharges; an overflowing sanitary cesspool, plus two additional unpermitted outlets showing evidence of prior usage. Samples taken by DEC on 2/21/84 showed violations of limitations for two permitted outlets, and violations of groundwater effluent standards and/or limitations (see Item 8, below). Non-compliance reports were not submitted with the DMR's. No engineering reports, plans or specifications were submitted or approved for construction of the Seven unpermitted outfalls.

3. Facts describing Respondent's cooperation or lack thereof

All unpermitted discharges have ceased, overflowing sanitary cesspool has been corrected.

4. Other proceedings, if any involving respondent

None

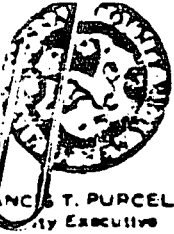
5. Recommendations

Compliance Conference X Hearing Priority High
Fine \$ 50,000 Performance Bond
Other Penalty
Consent Order Terms: See attached

6. Other Comments:

*Cape Breton
Environmental Organization*

*to
1984*



NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

FRANCIS T. PURCELL
County Executive

June 2, 1983

Mr. Jack Ehrenfeld
Alsy Mfg. Co.
270 Duffy Avenue
Hicksville, N.Y. 11801

Dear Mr. Ehrenfeld:

The Discharge Monitoring Reports recently submitted to this office have been reviewed.

These reports show that the discharge has exceeded maximum and average values several times for pH, copper and zinc. In addition, reports submitted in 1982 also show several constituents above discharge limits. This is a violation of Article 17, Section 17-0501 of the Environmental Conservation Law.

Action to correct this situation must be taken as quickly as possible. Please contact this office by June 17, 1983 to describe the action you have taken to bring the discharge into compliance.

Very truly yours,

Howard Schaefer
Howard Schaefer
Bureau of Land Resources Management

HS:ceg

cc: Daniel Larkin, NYSDEC,
Stony Brook

Nassau County Department of Health
Bureau of Land Resources Management

Appendix 1.1-31

Current Status of Matters Referred to DEC for Enforcement

November 27, 1984
Revision October 7, 1985

Received from:
Alsy Manufacturing Co., Hicksville Nassau Co. Dept. of Health

1. Description of Facility Operations

Electroplater - manufacturer of lamps by a variety of processes that place protective and decorative coatings on base metal.

2. Violations

On February 21, 1984 a DEC inspection and sampling revealed unpermitted discharges and a permitted discharge in violation of SPDES limits for copper, lead, nickel, zinc, cyanide, arsenic and volatile organic chemicals (1,1 dichloroethane, 1,1,1 trichloroethane, toluene, ethylbenzene, methylene chloride). Samples taken: November 17, 1983, October 2, 1984, May 8, 1985. DEC - February 21, 1984.

3. Current Status

Unpermitted discharges were stopped March 26, 1984 and cleanup of leaching pools completed by May 29, 1985. Complete investigation and site cleanup has not taken place. Site is on State Superfund List.

4. Current Threat

Possible threat to Hicksville Water District - closest public water supply wells in general direction of groundwater flow are two wells in that district approximately one mile southwest of the site. Current monitoring shows no contamination of these public water supply wells with the above chemicals.

5. Summary of Enforcement Actions

Waiting since May 1984 referral for DEC-Stony Brook to issue Consent Order requiring compliance with discharge standard and complete investigation and cleanup of site.

The facility completed an upgrade and modification of existing wastewater treatment system and connected all industrial wastewater discharges to the public sewer April 3, 1985.

DEC-Stony Brook issued Summary Abatement Order April 9, 1985 requiring all discharges not in compliance with standards be immediately stopped and arrange for removal of all wastes from leaching pools on site. Cleanup of contaminated leaching pools was completed May 29, 1985.

DEC proposed Consent Order issued June 4, 1985 requiring a Remedial Investigation of site contamination and a feasibility study for remediation. DEC sent letter on July 5, 1985 with terms required for fulfillment of Summary Abatement Order. Inspection by DEC on July 26, 1985 showed many, but not all, items completed.

Uncompleted items were not to be pursued. Site was to be dealt with instead as inactive hazardous waste site by use of Consent Order.

On September 20, the Hazardous Waste Unit of DEC informed NCDH that Consent Order will not be pursued but instead case has been referred to the Attorney General for criminal prosecution. Court Order will incorporate full field investigation.

6. Listing of Enforcement Actions

- NCDH letter - referral to DEC - May 1, 1984
- Draft consent order dated July 20, 1984 received by NCDH. - August 3, 1984
- NCDH letter comments on draft consent order - August 9, 1984
- DEC letter transmitting revised draft consent order received by NCDH. Revised draft C.O. is identical to July 20, 1984 draft C.O. - October 4, 1984
- NCDH letter to DEC encloses August 9, 1984 NCDH letter which recommended changes to the July 20, 1984 draft C.O. - October 9, 1984
- DEC October 1, 1984 enforcement status report received by NCDH. Indicates that the regional attorney has been reviewing the draft C.O. since August 17, 1984 and that it has also been transmitted to the Division of Hazardous and Solid Wastes in White Plains for review. Also indicates site newly listed as State Superfund site. - October 25, 1984
- Facility upgraded wastewater treatment system and connected all industrial wastewater discharges to public sewer - April 3, 1985
- DEC - Stony Brook issued summary abatement order for cessation of discharges not in compliance and for cleanup of leaching pools. - April 9, 1985
- DEC issues proposed consent order - June 4, 1985
- DEC sent letter with terms to achieve compliance with summary abatement order. - July 5, 1985

DEC inspection - many but not all - - July 26, 1985
items completed.

DEC informs NCDH that Summary - September 20, 1985
Abatement Order and Consent Order
will not be pursued, but instead
case has been referred to Attorney
General.

7 . Next Action Due

Court to incorporate full field
investigation in criminal
prosecution.

New York State Department of Environmental Conservation

MEMORANDUM

TO: John E. Iannotti, Supervisor, Eastern Remedial Section
FROM: Richard G. Torrey, Eastern Remedial Section
SUBJECT: ALSY, Hicksville, Long Island, Region 1
DATE: May 29, 1985

Received from
NYSDEC Region 1

This memo will bring you up to date on the above facility. We have discussed some of the items verbally.

On May 1, 1985 I attended a meeting on ALSY at the request of Phil Barbato, Region 1, Water Engineer. This meeting was held at the Nassau County Health Department Offices in Mineola. The subject of the meeting was the Summary Abatement Order for the facility, (a list of attendees is attached) and how it would be handled. After discussion, four points were agreed on:

1. The pits could be pumped through ALSY's new pretreatment facility.
2. A joint inspection would be held May 2nd⁷ to check the corrections required inside the buildings.
3. Rocky Piaggione of DEE, White Plains Office, would contact the AG's Office and request no action on their part against the site at this time.
4. The Department (DEC) would sample the soil and other leaching pits on site for E.P. Toxicity, total phenols, volatile, heavy metal, and any other contaminant found at the site in previous samples.

In addition to the above, I am to coordinate with all parties, the coverage at the site during any remedial action.

On May 2nd the joint inspection of the facility took place. Bill O'Brien, Region 1, conducted this as he was familiar with the discharge points. It appeared all illegal discharges had been eliminated.

At Phil's request I asked Jerry Rider to do a joint RCRA inspection of the site.

~~The points to be sampled were located today also.~~ The sampling was conducted on May 8th, with Terri Gerrish of DEE, White Plains, and Bill O'Brien assisting. There were six (6) water samples, and eight (8) soil samples obtained and shipped to Erco Labs in Mass. A chain of custody was used and the samples were split with H₂M, ALSY's representative.

Received from
WYSLIC Region 1

The week of May 20th, three (3) leaching pits (W1, W2, W3) and one catch basin were pumped out and treated in the ALSY pretreatment plant.

On May 22nd, I found leaching pits, pits W-2 and W3, with large amounts of water in them which would necessitate pumping them out again.

It was decided to test the roof drains with dye and water to determine if the water in these pits came from the heavy rain on May 21st. A roof drain from the old building was found to be still connected to the pits. The line from the building to the pits was dug up, cut off and plugged.

The pumping and treatment of the leaching pits was finished on May 25th.

Removal of the pits and contaminated soil will start when the sample results are received. I will coordinate this with the Region and NCHD.

Attachment

RGT:ks

cc: P. Barbato, Region 1
B. O'Brien, Region 1
Ted Sanford, Region 1

New York State Department of Environmental Conservation

MEMORANDUM

TO: File
FROM: Bill O'Brien *WOB*
SUBJECT: Sampling and Inspection of Alsy Mfg. on 8/1/84

DATE: August 2, 1984

I went to Alsy Mfg. on 8/1/84 to take samples from the industrial outfall 001. I was met there by Larry Chrysler of Alsy. Sample E184-207-11 was taken from the first cesspool - a strong volatile smell was noted when the cesspool was opened. Cesspool was filled to within 6 inches of cover. Mr. Chrysler informed me that all sanitary discharges were connected to sewers including the sanitary that had been connected to outfall 001. This is the first I was informed of sanitary connection to outfall 001, and I'm not sure it's correct. I next went to the second cesspool and took sample E184-207-13, the cover was off this cesspool and a gasoline powered pump was set up to pump out the cesspool but was not running. The outfall from the pump Mr. Chrysler informed me was in Cesspool #3, but I pointed out that the hose was not in Cesspool #3, but was on the ground east of the cesspools. A large area had been flooded by the pumping operation. Mr. Chrysler was informed that this was a violation, he said the operation would not resume. Cesspool #2 was filled to within about a foot of the cover. Cesspool #3 was sampled next, sample #E184-207-09. All samples will be analysed for Metals and Volatiles. Cesspool #3 was filled to within 4 inches of cover. Mr. Chrysler informed me that samples of liquid and sludge from all three cesspools were given to NY Test Labs last week and when results were received, cesspools would be pumped by RGM; this was anticipated to be in a week or two.

I next went into the building with Mr. Chrysler to see that the plating line overflow had been removed. Near the back door was a pile of PVC pipe, apparently removed from the overflow. About half way between the back door and the plating line the overflow was observed connected to a roof drain. Mr. Chrysler said he had never seen this before. We traced it back to the submersible pump behind the plating tanks. Mr. Chrysler was informed this was a violation. Mr. Chrysler then ordered a worker to cut out with a hack saw approximately six feet of the verticle pipe above the pump. This pipe was removed while I watched.

I was next shown the Cycle II Area and noted that all discharges appeared to have been removed. An inspection of the railroad siding area near the Cycle II paint shop showed the area to be clean, but the siding to be flooded. Mr. Chrysler informed me that this area always had a drainage problem.

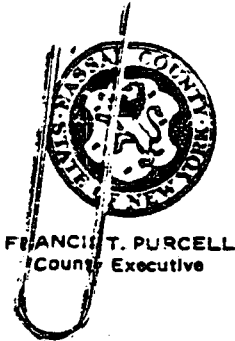
When questioned about hazardous waste storage practices, Mr. Chrysler showed me some 55 gallon drums and 5 gallon cans stored on pallets on a loading dock. I questioned Mr. Chrysler about the former storage of wastes in an alley on the south side of the building. He said he knew nothing about it. We went to the area and noted approximately 20 rusted 55 gallon drums. Of six checked to see if they contained liquid, four appeared to be full and two empty. One of the full drums appeared to be swelling as the top was bulged up. At least one other drum was noted in this condition but was not checked to determine if it was filled. Another full drum appeared to be leaking, the top of the drum had dull blue material around the cap, while the ground around the drum was covered with a shiney blue stain which appeared wet. There were numerous stains on the asphalt in the area of the drum storage and it is possible other drums are leaking. Only two drums were observed to be labeled; one with a Hazardous waste label and one labeled "Bad Paint". In February most drums in this area bore Hazardous Waste labels. Mr. Chrysler was informed that this probably represented a violation, and he said he was unaware of the drums, and would have them removed as soon as he had the contents analyzed.

When we returned to Mr. Chrysler's office, I questioned him about the discharge of untreated rinse water from the plating line to a storm drain mentioned in H2M's engineering report. Mr. Chrysler said he knew of no such discharge but would try to find out what discharge was being referred to. Mr. Chrysler reported that most improvements to the treatment system recommended by the report had been implemented, while a few would be done when necessary equipment was received. He said that when upgrade was complete much or all process wastewater would probably be recycleable.

A real estate agency sign was noted on the southeast corner of the building. When Mr. Chrysler was questioned about this and he said he had never seen it.

sp

cc: A. Yerman
G. Robin
P. Barbato
H. Schaefer, NCDH



NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

FRANCIS T. PURCELL
County Executive

December 13, 1983

Mr. Jack Ehrenfeld, General Manager
Alsey Mfg. Co.
270 Duffy Avenue
Hicksville, N.Y. 11801

Dear Mr. Ehrenfeld:

Recently a sample was collected of your industrial wastewater discharge. Analysis of this sample for organic chemicals shows it to contain certain chemicals in concentrations exceeding allowable amounts.

<u>Constituent</u>	<u>Allowable Limit</u>	<u>Test Result</u>
Methylene Chloride	50 ug/l	63 ug/l
Total Organics*	100 ug/l	154 ug/l

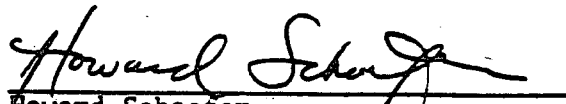
*Includes chloroform 9 ug/l, 1,1,1 trichloroethane 30 ug/l, toluene 39 ug/l, xylene 13 ug/l.

A copy of the test result has been enclosed for your reference. Please investigate the source of this contamination and take measures to eliminate it. Contact this office by December 28, 1983 to report on your success.

Analysis of the sample for inorganic chemicals has not been completed. The results will be forwarded to you when they are received by this office.

I may be contacted at 535-2284 if you have any questions.

Very truly yours,


Howard Schaefer
Bureau of Land Resources Management

HS:no
Enc.

LABORATORY REPORT

CHEMICAL EXAMINATION OF INDUSTRIAL
AND HAZARDOUS WASTESDivision of Laboratories and Research
Nassau County Department of Health

- 1 ☒ Routine
 2 ☐ Resample
 3 ☐ Special
 4 ☐ Complaint
 5 ☐ Other

Lab. No.

13920

Field No.

VH 302

Source Information (Please Print)

Premises

Alsu M-50

Address

Duffin Ave.

Town

Wicksville

Collection Point

Duffin Ave. - Wicksville

Month Day

Date Collected

11 7

Date Received

Date Reported

Collection Time 2:00 PM : 4/11/82

Collected By:

Sampler's Comments:

Bureau:

- 1 ☐ Land Resources Management
 9 ☐ Other (specify)

Sample Type:

- A ☒ Water D ☐ Waste Solvent
 B ☐ Soil E ☐ Oil
 C ☐ Sludge F ☐ Other

CHEMICAL EXAMINATION

SPECIAL ANALYSIS

Check	Metals	Result	Check	Non-Metals	Result	Check	Constituent	Result
1	Aluminum mg/l	400.0	15	Chloride mg/l	43.8	29	Chromium hex. mg/l	
2	Arsenic mg/l	0.065	16	Cyanide mg/l		30		
3	Barium mg/l	<0.5	17	Fluoride mg/l	<0.20	31		
4	Cadmium mg/l	<0.001	18	MBAS mg/l	0.06	32		
5	Chromium, Total mg/l	<0.01	19	pH	9.3	33		
6	Copper mg/l	3.05	20	Phenols mg/l		34		
7	Iron, Total mg/l	5.82	21	Solids, Suspended mg/l		35		
8	Lead mg/l	<0.01	22	Solids, Total Diss. mg/l	1392	36		
9	Manganese mg/l	<0.05	23	Sulfate mg/l	870	37		
10	Mercury mg/l		24	Ammonia nitrogen mg/l	0.73	38		
11	Nickel mg/l	1.00	25	Kjeldahl nitrogen mg/l	3.3	39		
12	Selenium mg/l	<0.005	26	Nitrite nitrogen mg/l	0.017	40		
13	Silver mg/l	0.10	27	Nitrate nitrogen mg/l	2.60	41		
14	Zinc mg/l	2.30	28	Total Phos. mg/l		42		

Examiner's Comments

BOTTLE NOT SUBMITTED FOR PHENOL.
 BOTTLE NOT SUBMITTED FOR CYANIDE.

LIMITATIONS AND MONITORING REQUIREMENTS

...ed beginning EDP
... until 5 Years From EDP
...arges from the permitted facility shall be limited and monitored by the
...ee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Monitoring Reqs.	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
001 Flow		NA		Continuous	Recorder
Copper-Total		1	mg/l	Monthly	Composite
Cyanide-Total		.4	"	"	"
Nickel-Total		2	"	"	"
Zinc-Total		5	"	"	"
Total Nitrogen		10	"	"	"
Phenol		.002	"	"	"
pH (Range)	6.5 - 8.5		SU	"	Grab
Chloroform		.1	mg/l	Quarterly	"
Dichlorobromomethane		.05	"	"	"
Methylene Chloride		.02	"	"	"
2,4-Dinitrophenol		.25	"	"	"

Clause 1: The permit application must list all the corrosion/scale inhibitors or biocidal-type compounds used by the permittee. If use of new boiler/cooling water additives is intended, application must be made prior to use.

Alsy Manufacturing



Potential Hazardous Waste Site

Preliminary Assessment

PAI
New Site Discovery

DRAFT

FILE COPY

COMPLETED



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	New

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Alsy Manufacturing		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 270 Duffy Avenue			
03 CITY Hicksville (Town of Oyster Bay)		04 STATE NY	05 ZIP CODE 11801	06 COUNTY Nassau	07 COUNTY CODE 08 CONG DIST
09 COORDINATES LATITUDE 40° 45' 47" N LONGITUDE 73° 31' 52" W					

10 DIRECTIONS TO SITE (Starting from nearest public road)

The site is located on the north side of Duffy Avenue about 3/4 of a mile west of the intersection of Duffy Avenue and Newbridge Road.

III. RESPONSIBLE PARTIES

01 OWNER (if different) Surrey Corp.		02 STREET (Business, mailing, residential) 6901 Jericho Turnpike			
03 CITY Syosset		04 STATE NY	05 ZIP CODE 11791	06 TELEPHONE NUMBER (516) 361-2000	
07 OPERATOR (if known and different from owner) Mr. Alvin Gindel, Pres. Alsy Manufacturing, Inc.		08 STREET (Business, mailing, residential) 270 Duffy Avenue			
09 CITY Hicksville (Town of Oyster Bay)		10 STATE NY	11 ZIP CODE 11801	12 TELEPHONE NUMBER (516) 822-5252	

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: / / ☐ B. UNCONTROLLED WASTE SITE (RCRA 103(a)) DATE RECEIVED: / / ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 1/23/86 <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input checked="" type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: EA Science and Technology CONTRACTOR NAME(S):	
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1977 present <input type="checkbox"/> UNKNOWN	

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED
SPDES discharge of treated plating wastes to leaching pools. Wastes bypassing treatment were discharged to ground. Crusts with multi-layers of paint or paint sludge were observed near railroad spur.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Samples of discharge and surrounding soils indicates potential soil and ground-water contamination.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Remedial Action)
☐ A. HIGH ☒ B. MEDIUM ☐ C. LOW ☐ D. NONE

VI. INFORMATION AVAILABLE FROM

01 CONTACT Rebecca Ligotino		02 OF (Agency Organization) EA Science and Technology		03 TELEPHONE NUMBER (914) 692-6706	
04 PERSON RESPONSIBLE FOR ASSESSMENT Stephen Barry		05 AGENCY	06 ORGANIZATION EA	07 TELEPHONE NUMBER 914 692-6706	08 DATE 3/25/86



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER New

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

☐ A SOLID
☐ B POWDER, FINES
☐ C SLUDGE
☐ D OTHER (Specify) _____
☐ E SLURRY
☒ F LIQUID
☐ G GAS

02 WASTE QUANTITY AT SITE

(Measured by waste generator
must be accompanied)

TONS _____

CUBIC YARDS _____

NO OF DRUMS Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

☒ A TOXIC
☐ B CORROSIVE
☐ C RADIOACTIVE
☒ D PERSISTENT
☐ E SOLUBLE
☐ F INFECTIOUS
☒ G FLAMMABLE
☐ H IGNITABLE
☒ I HIGHLY VOLATILE
☐ J EXPLOSIVE
☐ K REACTIVE
☐ L INCOMPATIBLE
☐ M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OLY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	Unknown		
IOC	INORGANIC CHEMICALS	Unknown		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Methylene chloride	75-09-2	TK/OD/DR	600	ppb
SOL	1,1,1 Trichloroethane	71-55-6	TK/OD/DR	600	ppb
SOL	1,1 Dichloroethane	75-34-3	TK/OD/DR	600	ppb
SOL	1,2 Dichloropropane	78-99-9	TK/OD/DR	Unknown	
SOL	1,1 Dichloroethylene	75-35-4	TK/OD/DR	Unknown	
SOL	Toluene	108-88-3	TK/OD/DR	600	ppb
SOL	Xylene	1330-20-7	TK/OD/DR	Unknown	
OCC	Ethyl benzene	100-41-4	TK/OD/DR	240	ppb
MES	Nickel	7440-02-0	TK/OD/DR	88.5	mg/liter
MES	Chromium	7440-47-3	TK/OD/DR	0.19	mg/liter
MES	Arsenic	7440-38-2	TK/OD/DR	57	ppb
MES	Lead	7439-92-1	TK/OD/DR	120	ppb
MES	Cadmium	7440-43-9	TK/OD/DR	0.33	mg/liter
IOC	Cyanide				

V. FEEDSTOCKS (See Appendix for CAS Numbers) Unknown

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (See Appendix for sources, e.g., data tags, sample analysis, records)

EA site inspection, 23 January 1986

New York State Department of Environmental Conservation Bureau of Hazardous Site Control files.

Nassau County Department of Health files

New York State Department of Environmental Conservation Region I files

For each shipment of wastes, complete the following table with the indicated information. ATTACH COPIES OF MANIFESTS OR RECEIPTS FROM SCAVENGER FOR EACH SHIPMENT MADE:

Date of Shipment	Type of Waste (chemical, oil or solvents)	Amount Shipped	Scavenger Name	Scavenger Address	Shipped By	Scavenger Number	Shipped To (Final Disposal Site For Waste)
1/11/85	Solvent	330 gal	Chemical Waste Disposal	42 W 19th Ave, Bklyn, NY 11211	Hydro-Tek	Hydro-Tek	Chemical Waste Disposal
1/16/85	Solvent	220 gal	"	"	"	"	Chemical Waste Disposal
2/1/85	Solvent	165 gal	"	"	"	"	Chemical Waste Disposal
2/1/85	Solvent	165 gal	"	"	"	"	Chemical Waste Disposal
2/1/85	Solvent	165 gal	"	"	"	"	Chemical Waste Disposal
2/28/85	Solvent	330 gal	"	"	"	"	Chemical Waste Disposal
5/30/85	Solvent	110 gal	"	"	"	"	Chemical Waste Disposal
5/30/85	Corrosive Chemical	55 gal	"	"	"	"	Chemical Waste Disposal
6/4/85	Solvent	440 gal	Techniques Ecological	8 Wadsworth St, Bklyn, NY 11224	Hydro-Tek	Hydro-Tek	Techniques Ecological
6/4/85	Waste Paint	110 gal	"	"	"	"	Techniques Ecological
8/22/85	Solvent	440 gal	"	"	"	"	Techniques Ecological
10/22/85	Solvent	330 gal	"	"	"	"	Techniques Ecological
11/15/85	Waste Solvent	10 cu yds	Waste Waste, Inc	115 Jacobus Ave, 30-Kearney, NJ 07033	Waste Waste	Waste Waste	Waste Waste
11/18/85	Waste Solvent	20 cu yds	"	"	"	"	"

Identical spills that occurred during the reporting period:

Describe the nature of spill

Title

Date: 1/30/85



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY REPORT

Lab No.

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

Project No. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

COLLECTED BY: RG 99

DATE COLLECTED: 2/21/84

DATE RECEIVED: 2/21/84

DEC ID# E-184-207-08

SOIL SAMPLE

PRIORITY POLLUTANT METALS & TOC & PHENOL

Aisy

1884

PARAMETER

RESULT

PARAMETER

RESULT

Antimony

<0.27

Selenium

<0.95

Arsenic

1.9

Silver

1.9

Beryllium

<0.93

Thallium

<0.27

Cadmium

4.7

Zinc

65

Chromium

13

T.Org

Carbon

1.58%

Copper

55.9

Phenols

1.90

Lead

140

Mercury

0.23

Nickel

280

RECEIVED FROM INSPEC
DIVISION OF ENVIRONMENTAL
LIFE/SCIENCE
WHITE PLAINS

All results reported in mg/kg or percent (%) Dry Weight.

Date Reported: 8/16/84

S. C. McLENDON, P.C., LABORATORY DIRECTOR



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRILL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

LAB NO. 44432

PROJECT NO. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONS.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 10/10/84

COLLECTED BY WO 94

DATE RECEIVED - 10/10/84

PRIORITY POLLUTANT METALS & CYANIDE

DEC ID #E-184-207-14

LIQUID SMPLE

Also - Treatment System Discharge

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY

<0.20 ✓

SELENIUM

<2.000 ✓

ARSENIC
DERYL-LIUM

10.00 ✓

SILVER

<0.02 ✓

THALLIUM

<0.20 ✓

CADMIUM
CHROMIUM

<0.02 ✓

ZINC

0.28 ✓

CYANIDE

0.17 ✓

COPPER

0.65

Permit limit 0.40

LEAD

<0.20

limit 0.05

MERCURY

<0.500 ✓

NICKEL

0.33 ✓

RECEIVED

NOV - 5 1984

DEPT. OF WATER RESEARCH
DIVISION OF WATER

Received from: Dept. of Health

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC.COND. (UMHOS) SETT.SOLIDS (ML/L)

DATE REPORTED 10/29/84

S. C. McLENDON, P.E., LABORATORY DIRECTOR



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY REPORT

5.1.92

LAB NO. 4551

PROJECT NO. 2C

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
WASTE STUDIES • INDUSTRIAL WASTEWATER • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

COLLECTED BY RG

DATE RECEIVED - 2/21/84

CLIENT'S NAME AND ADDRESS

TYPE OF SAMPLE - MISCELLANEOUS
DATE COLLECTED - 2/21/84

N.Y.S. DEPT. OF ENV. CONS.
50 WOLF ROAD
ALBANY, NY 12233

EP TOXICITY METALS
DEC ID 0E-184-207-07
SOIL SAMPLE

Also "Gesso" - West side of Bldg

PARAM-ETER

RESULT

ARSENIC 29.5 0

BARIUM 1.50

CADMIUM 0.33

CHROM-IUM 0.14

LEAD 6.20

MERCURY <0.500

SELEN-IUM 9.000

SILVER <0.02

Received from:
Nassau Co. Dept. of Health

RECEIVED
JUN 11 1984
BUREAU OF WATER RESEARCH
DIVISION OF PURE WATERS

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY 0 (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC.COND. (UMHOS) SETT.SOLIDS (ML/L)

DATE REPORTED 5/30

[Signature]
S. C. McLENDON, P.E., LABORATORY DIRECTOR



Environmental Engineers & Scientists
 HOLZMACHER, McLENDON and MURRILL, P.C.
 575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY REPORT

5.1.93

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
 MODEL STUDIES • PILOT PLANT STUDIES • WATER WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LAB NO. 4551
 PROJECT NO. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONS.
 50 WOLF ROAD
 ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS
 DATE COLLECTED - 2/21/84

COLLECTED BY RG
 DATE RECEIVED - 2/21/84

EP TOXICITY METALS
 DEC ID 9E-184-207-0713
 SOIL SAMPLE

E184-207-08
 Albany, "Gesso" - Northside of Bldg

PARAM- ETER RESULT

ARSENIC 20.5 #

BARIUM 0.80

CADMIUM 0.24

CHROM-
IUM 0.19

LEAD 4.00

MERCURY <0.50#

SELEN-
IUM 18.3 #

SILVER <0.02

Received from:
 Nassau Co. Dept. of Health

RECEIVED

JUN 11 1984

BUREAU OF WATER RESEARCH
 DIVISION OF PURE WATERS

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
 T. COLI BACT. & FECAL COLI (MPN/100ML)
 COLOR, ODOR, TURBIDITY & PH (UNITS)
 APC & FECAL STREP (COUNTS/ML)
 SPEC. COND. (UMHOS) SETT. SOLIDS (ML/L)

DATE REPORTED 5/30

S. C. McLENDON, P.E., LABORATORY DIRECTOR



HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS ENVIRONMENTAL SCIENTISTS and PLANNERS

575 BROAD HOLLOW ROAD, MELVILLE NY 11747 • 516-894-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab No. 452032
Sample: DEC ID# E-184-207-06
Date Sampled: 2/21/84
Collected By: WO 99 *O'Brien*

ACID EXTRACTABLE PRIORITY POLLUTANTS

<u>Compound</u>	<u>ug/l</u>
2-Chlorophenol	ND
2-Nitrophenol	ND
Phenol	ND
2,4-Dimethylphenol	ND
2,4-Dichlorophenol	ND
2,4,6-Trichlorophenol	ND
4-Chloro-3-methylphenol	ND
2,4-Dinitrophenol	2) ND
2-Methyl-4,6-dinitrophenol	2) ND
Pentachlorophenol	ND
4-Nitrophenol	1) ND

Method limit of detection: lower than 25 ug/l (unless indicated otherwise)

Quantification limit: 25 ug/l

ND - Under detection limit.

1) Method limit of detection 40 ug/l.

2) Method limit of detection 60 ug/l.

Date Reported: 8/15/84

[Signature]

S.C. McLendon, P.E. Lab Director

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS



HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 894-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Print Shop discharge

Alsy

Lab. No. 452030, 452031

Sample Description:
DEC ID#E-184-207-06

Amended report, replaces 6/20/84

Date Sampled: 2/21/84

Time Sampled:

Collected By: WD 99

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	1100
Trichlorofluoromethane	ND
1,1-dichloroethene	ND
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	ND
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	ND
Chlorobenzene	ND
Ethylbenzene	ND
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of
detection: lower
than 100 ug/l

Quantification
limit: 100 ug/l

ND - Under
detection limit

1) Method limit
of detection:
lower than 100 ug/l

Date Reported: 7/13/84

S.C. McLendon, P.E., Lab Director



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MLLVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

S.I. 91P

LAB NO. 452033

PROJECT NO. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONV.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 2/21/84

COLLECTED BY WD 99

DATE RECEIVED - 2/21/84

PRIORITY POLLUTANT METALS

DEC ID 4E-184-207-06

LIQUID SAMPLE

Also Hg - Plumbum, dily.

PARAM- ETER	RESULT	PARAM- ETER	RESULT
----------------	--------	----------------	--------

ANTI- MONY	<0.20	SELEN- IUM	<2.000
---------------	-------	---------------	--------

ARSENIC	<2.000	SILVER	<0.02
BERYL- LIUM	<0.02	THAL- LIUM	<0.20

CADMIUM	<0.02	ZINC	0.15
CHROM- IUM	<0.02		

COPPER	0.07
--------	------

LEAD	8.000
------	-------

MERCURY	<0.50
---------	-------

NICKEL	<0.02
--------	-------

Received From:
Nassau Co. Dept. of Health

RECEIVED
NEDH
BLM

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY 0 (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC.COND. (UMHOS) SETT.SOLIDS (ML/L)

DATE REPORTED 3/ 7/84

S. C. McLENDON, P.E., LABORATORY DIRECTOR



HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS ENVIRONMENTAL SCIENTISTS and PLANNERS

575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab No. 452028
Sample: DEC ID# E-184-207-05
Date Sampled: 2/21/84
Collected By: WD 99 *O'Brien*

ACID EXTRACTABLE PRIORITY POLLUTANTS

<u>Compound</u>	<u>ug/l</u>
2-Chlorophenol	ND
2-Nitrophenol	ND
Phenol	ND
2,4-Dimethylphenol	ND
2,4-Dichlorophenol	ND
2,4,6-Trichlorophenol	ND
4-Chloro-3-methylphenol	ND
2,4-Dinitrophenol	2) ND
2-Methyl-4,6-dinitrophenol	2) ND
Pentachlorophenol	ND
4-Nitrophenol	1) ND

Method limit of detection: lower than 25 ug/l (unless indicated otherwise)

Quantification limit: 25 ug/l

ND - Under detection limit.

1) Method limit of detection 40 ug/l.

2) Method limit of detection 60 ug/l.

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

Date Reported: 8/15/84

S.C. McLendon, P.E. Lab Director



HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 694-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

Y.S. DEC
10 Wolf Road
Albany, NY 12233

Lab. No. 452026, 452027

Sample Description:
DEC ID#E-184-207-05

Date Sampled: 2/21/84

Time Sampled:

Collected By: WO 99

Alsy

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	540
Trichlorofluoromethane	ND
1,1-dichloroethene	ND
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	ND
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	2) > 600
Toluene	ND
Chlorobenzene	540
Ethylbenzene	1) ND
Acrolein	1) ND
Acrylonitrile	ND

Method limit of detection: lower than 10 ug/l

Quantification limit: 10 ug/l

ND - Under detection limit

• - Detected, but less than 10 ug/l

1) Method limit of detection: lower than 100 ug/l

2) Exceeds instrument linearity.

Date Reported: 6/19/84

S.C. McLendon, P.E., Lab Director

[Signature]



Environmental Engineers & Scientists

1101 /MACHER, McLENDON and MUIRHEAD, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

5190P

LAB NO. 452029

PROJECT NO. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONV.
50 WOLF ROAD
ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS
DATE COLLECTED - 2/21/84

COLLECTED BY MO 99
DATE RECEIVED - 2/21/84

PRIORITY POLLUTANT METALS
DEC ID 0E-184-207-03
LIQUID SAMPLE

May 17/84 Disch near paint shop

PARAM- ETER	RESULT	PARAM- ETER	RESULT
----------------	--------	----------------	--------

ANTI- MONY	<0.20	SELEN- IUM	<2.000
---------------	-------	---------------	--------

ARSENIC	39.0 0	SILVER	0.02
BERYL- LIUM	<0.02	THAL- LIUM	<0.20

CADMIUM	<0.02	ZINC	1.35
CHROM- IUM	0.02		

COPPER	1.80		
--------	------	--	--

LEAD	1.90		
------	------	--	--

MERCURY	<0.50		
---------	-------	--	--

NICKEL	0.12		
--------	------	--	--

Received from:
Nassau Co. Dept. of Health

RECEIVED
FEB 22 1984
NCDH
BLRM

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY 0 (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC.COND. (UMHOB) SETT.SOLIDS (ML/L)

DATE REPORTED 3/ 7/84

S. C. McLENDON, P.E., LABORATORY DIRECTOR

575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab No. 452024
Sample: DEC ID# E-184-207-04
Date Sampled: 2/21/84
Collected By: WD 99

ACID EXTRACTABLE PRIORITY POLLUTANTS

<u>Compound</u>	<u>ug/l</u>
2-Chlorophenol	ND
2-Nitrophenol	ND
Phenol	ND
2,4-Dimethylphenol	ND
2,4-Dichlorophenol	ND
2,4,6-Trichlorophenol	ND
4-Chloro-3-methylphenol	ND
2,4-Dinitrophenol	2) ND
2-Methyl-4,6-dinitrophenol	2) ND
Pentachlorophenol	ND
4-Nitrophenol	1) ND

Method limit of detection: lower than 25 ug/l (unless indicated otherwise)

Quantification limit: 25 ug/l

ND - Under detection limit.

1) Method limit of detection 40 ug/l.

2) Method limit of detection 60 ug/l.

Date Reported: 3/29/84

S.C. McLendon

S.C. McLendon, P.E. Lab Director

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS



HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 694-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Sanitary cesspool Hsy

Lab. No. 452022, 452023

Sample Description:
DEC ID# E-184-207-04

Date Sampled: 2/21/84

Time Sampled:

Collected By: RG 99

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	ND
Trichlorofluoromethane	ND
1,1-dichloroethene	ND
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	ND
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	700
Chlorobenzene	ND
Ethylbenzene	ND
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of
detection: lower
than 100 ug/l

Quantification
limit: 100 ug/l

ND - Under-
detection limit

* - Detected, but
less than 100 ug/l

1) Method limit
of detection:
lower than 1000 ug/l

Detection limits
modified due to
sample dilution.

RECEIVE

JUL 16 1984

BUREAU OF WATER RESEARCH
DIVISION OF PURE WATERS

Date Reported: 7/5/84

S.C. McLendon, P.E., Lab Director



HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 694-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab. No. 452022, 452023

Sample Description:
DEC ID #E-184-207-04

Date Sampled: 2/21/84

Time Sampled:

Collected By: WO 99

Asy

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	19
Trichlorofluoromethane	ND
1,1-dichloroethene	ND
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	ND
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	2) > 600
Chlorobenzene	ND
Ethylbenzene	*
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of
detection: lower
than 10 ug/l

Quantification
limit: 10 ug/l

ND - Under
detection limit

* - Detected, but
less than 10 ug/l

1) Method limit
of detection:
lower than 100 ug/l

2) Exceeds instrument
linearity.

SEE ATTACHED
REPORT ATTACHED

K

Date Reported: 6/20/84

Overflowing Sewerage Casspool
On North side of Hwy

S.C. McLendon, P.E., Lab Director

[Signature]



Environmental Engineers & Scientists

HEN ZMACHER, MCELHENON and MURRELL, P.C.

100 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3640

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

LAB NO. 452025

PROJECT NO. 2C

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONV.
50 WOLF ROAD
ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 2/21/84

COLLECTED BY MO 99

DATE RECEIVED - 2/21/84

PRIORITY POLLUTANT METALS

DEC ID 9E-184-207-04

LIQUID SAMPLE

Also Hg - N series, CP

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY	<0.20	SELENIUM	<2.000
-----------	-------	----------	--------

ARSENIC	4.000	SILVER	<0.02
BERYLLIUM	<0.02	THALLIUM	<0.20

CADMIUM	<0.02	ZINC	0.39
CHROMIUM	<0.02		

COPPER	0.05		
--------	------	--	--

LEAD	78.00		50.00
------	-------	--	-------

MERCURY	<0.50		
---------	-------	--	--

NICKEL	<0.02		
--------	-------	--	--

Received from:
Nassau Co. Dept. of Health

RECEIVED
FEB 22 1984
NCDH
BLRM

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY % (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC. COND. (UMHOS) SETT. SOLIDS (ML/L)

DATE REPORTED 3/ 7/84

S. C. McELHENON, P.E., LABORATORY DIRECTOR

HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 694-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab. No. 452020/452021

Amended report, replaces 6/20/84

Sample Description:

DEC ID#E-184-207-02

Date Sampled: 2/21/84

Time Sampled:

Collected By: WO 99

* Re-reported sample due to dilution

Plating line Overflow

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	ND
Trichlorofluoromethane	ND
1,1-dichloroethene	400
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	74,000
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	5100
Chlorobenzene	ND
Ethylbenzene	200
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of detection: lower than 100 ug/l

Quantification limit: 100 ug/l

ND - Under detection limit

1) Method limit of detection: lower than 1000 ug/l

Detection limits modified due to sample dilution

Date Reported: 7/13/84

S.C. McLendon, P.E., Lab Director

[Signature]



HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 894-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

WDB
7/30 - Samples run w/dilute
to be forwarded AS

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Alsy

Lab. No. 452020, 452021

Sample Description:

DEC ID#K-184-207-02

E

Date Sampled: 2/21/84

Time Sampled:

Collected By: WO 99

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	*
Chloroethane	ND
Methylene chloride	49
Trichlorofluoromethane	ND
1,1-dichloroethene	600
1,1-dichloroethane	16
Cis/Trans-1,2-dichloroethene	ND
Chloroform	*
1,2-dichloroethane	ND
1,1,1-trichloroethane	2) > 600
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	*
Dibromochloromethane	ND
1,1,2-trichloroethane	13
Cis-1,3-dichloropropene	ND
Benzene	*
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	2) > 600
Chlorobenzene	ND
Ethylbenzene	240
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of detection: lower than 10 ug/l

Quantification limit: 10 ug/l

ND - Under detection limit

* - Detected, but less than 10 ug/l

1) Method limit of detection: lower than 100 ug/l

2) Exceeds instrument linearity.

SEE AMENDED
REPORT ATTACHED

Date Reported: 6/20/84

Overflow from Plumbing line

S.C. McLendon, P.E., Lab Director



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

S1.87P

LAB NO. 45201

PROJECT NO. 2C

COLLECTED BY W0 S

DATE RECEIVED - 2/21/84

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONSV.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS
DATE COLLECTED - 2/21/84

PRIORITY POLLUTANT METALS
DEC ID 4E-184-207-02
LIQUID SAMPLE

Also H₂ - Blowing line overflow

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY	<0.20	SELEN-IUM	2.000
-----------	-------	-----------	-------

ARSENIC	57.0	SILVER	0.03
---------	------	--------	------

BERYL-LIUM	<0.02	THAL-LIUM	<0.20
------------	-------	-----------	-------

CADMIUM	<0.02	ZINC	9.12
---------	-------	------	------

CHROM-IUM	<0.02		
-----------	-------	--	--

COPPER	59.9		
--------	------	--	--

LEAD	120.0		
------	-------	--	--

MERCURY	<0.50		
---------	-------	--	--

NICKEL	29.2		
--------	------	--	--

Received from:
Nassau Co. Dept. of Health

RECEIVED

APR 6 1984

NCDH
BLRM

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY % (UG/L) OR % (PERCENT) AND-
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)
SPEC.COND. (UMHOS) SETT.SOLIDS (ML/L)

DATE REPORTED 3/7/84

[Signature]

S. E. McLENDON, P.E., LABORATORY DIRECTOR

THE LIABILITY OF H2M CORP. SHALL BE LIMITED TO THE PRICE OF THE SERVICE RENDERED AND PAID



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694 3040

LABORATORY 5181 REPORT

LAB NO. 452019

PROJECT NO. 2C

COLLECTED BY MO 99

DATE RECEIVED - 2/21/84

 TYPE OF SAMPLE - MISCELLANEOUS
 DATE COLLECTED - 2/21/84

 PRIORITY POLLUTANT METALS
 DEC ID 4E-184-207-03
 LIQUID SAMPLE
Also ml₃ - SIDES C.H.L.I. - ZINC

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONV.

30 WOLF ROAD

ALBANY, NY 12233

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY	<0.20	SELENIUM	<2.000
-----------	-------	----------	--------

ARSENIC	10.50	SILVER	<0.02
BERYLLIUM	<0.02	THALLIUM	<0.20

CADMIUM	<0.02	ZINC	1.49
CHROMIUM	<0.02		

COPPER	4.30		
--------	------	--	--

LEAD	111.0		
------	-------	--	--

MERCURY	<0.50		
---------	-------	--	--

NICKEL	42.7		
--------	------	--	--

 Received from:
 Nassau Co. Dept. of Health

 RECEIVED
 12276 1984

 NCDH
 BLRM

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY Ø (UG/L) OR % (PERCENT) AND
 T. COLI BACT. & FECAL COLI (MPN/100ML)
 COLOR, ODOR, TURBIDITY & PH (UNITS)
 APC & FECAL STREP (COUNTS/ML)
 BPEC. COND. (UMHOB) SETT. SOLIDS (ML/L)

DATE REPORTED 3/7/84

S.C. McLENDON, P.E., LABORATORY DIRECTOR

575 BROAD HOLLOW ROAD, MELVILLE, NY 11747 • 516-894-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
 50 Wolf Road
 Albany, NY 12233

Lab No. 452016
 Sample: DEC ID# E-184-207-01
 Date Sampled: 2/21/84
 Collected By: RG 99

Aisy

ACID EXTRACTABLE PRIORITY POLLUTANTS

RECEIVED FROM NYSDEC
 DIVISION OF ENVIRONMENTAL
 ENFORCEMENT
 WHITE PLAINS

<u>Compound</u>	<u>ug/l</u>
2-Chlorophenol	ND
2-Nitrophenol	ND
Phenol	ND
2,4-Dimethylphenol	ND
2,4-Dichlorophenol	ND
2,4,6-Trichlorophenol	ND
4-Chloro-3-methylphenol	ND
2,4-Dinitrophenol	2) ND
2-Methyl-4,6-dinitrophenol	2) ND
Pentachlorophenol	ND
4-Nitrophenol	1) ND

Method limit of detection: lower than 25 ug/l (unless indicated otherwise)

Quantification limit: 25 ug/l

ND - Under detection limit.

1) Method limit of detection 40 ug/l.

2) Method limit of detection 60 ug/l.

Date Reported: 8/15/84

S.C. McLendon

S.C. McLendon, P.E. Lab Director

HOLZMACHER, McLENDON & MURRELL, P.C. • WATERWASTE WATER LABORATORY AND ANALYTICAL SERVICES
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 • (516) 694-3040
APPROVED DRINKING WATER LABORATORY IN NEW YORK, NEW JERSEY & CONNECTICUT

Client Name and Address

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

SPDES Outfall 001
127 (ESSRCC)

Alsy

Lab. No. 452014, 452015

Sample Description:

DEC ID#E-184-207-01

Date Sampled: 2/21/84

Time Sampled:

Collected By: RG 99

PRIORITY

PURGEABLE ORGANICS

POLLUTANTS

COMPOUND	ug/l
Chloromethane	ND
Bromomethane	ND
Vinyl chloride	ND
Chloroethane	ND
Methylene chloride	ND
Trichlorofluoromethane	ND
1,1-dichloroethene	300
1,1-dichloroethane	ND
Cis/Trans-1,2-dichloroethene	ND
Chloroform	ND
1,2-dichloroethane	ND
1,1,1-trichloroethane	42000
Carbon tetrachloride	ND
Bromodichloromethane	ND
1,2-dichloropropane	ND
Trans-1,3-dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-trichloroethane	ND
Cis-1,3-dichloropropene	ND
Benzene	ND
2-chloroethylvinyl ether	ND
Bromoform	ND
1,1,2,2-tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	6600
Chlorobenzene	ND
Ethylbenzene	900
Acrolein	1) ND
Acrylonitrile	1) ND

Method limit of detection: lower than 100 ug/l

Quantification limit: 100 ug/l

ND - Under detection limit

* - Detected, but less than 100 ug/l

1) Method limit of detection: lower than 1000 ug/l

Detection limits modified due to sample dilution.

RECEIVED

JUL 12 1984

BUREAU OF WATER RESEARCH
DIVISION OF PURE WATER

Date Reported: 7/5/84

S.C. McLendon, P.E., Lab Director

[Signature]



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY
REPORT

S.I. 86P

LAB NO. 452017

PROJECT NO. 2C

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONSV.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

COLLECTED BY RO 99

DATE COLLECTED - 2/21/84

DATE RECEIVED - 2/21/84

PRIORITY POLLUTANT METALS & CYANIDE

DEC ID DE-184-207-01

LIQUID SAMPLE

Alby MR - SICES outfall - fire CP

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY	<0.20	SELEN-IUM	4.008
-----------	-------	-----------	-------

ARSENIC	34.0 0	SILVER	0.03
---------	--------	--------	------

BERYL-LIUM	<0.02	THAL-LIUM	<0.20
------------	-------	-----------	-------

CADMIUM	<0.02	ZINC	6.23 Limit 50
---------	-------	------	---------------

CHROM-IUM	0.02	CYANIDE	0.96 Limit 0.40
-----------	------	---------	-----------------

COPPER	10.0 Limit 1.0		
--------	----------------	--	--

LEAD	0.60 Limit 0.05		
------	-----------------	--	--

MERCURY	<0.50 *		
---------	---------	--	--

NICKEL	88.5 Limit 2.0		
--------	----------------	--	--

RECEIVED

22 FEB 1984

NCDH
BLRMReceived From:
Nassau Co. Dept. of Health

Appendix 1.1-15

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY 0 (UG/L) OR % (PERCENT) AND

T. COLI BACT. & FECAL COLI (MPN/100ML)

COLOR, ODOR, TURBIDITY & PH (UNITS)

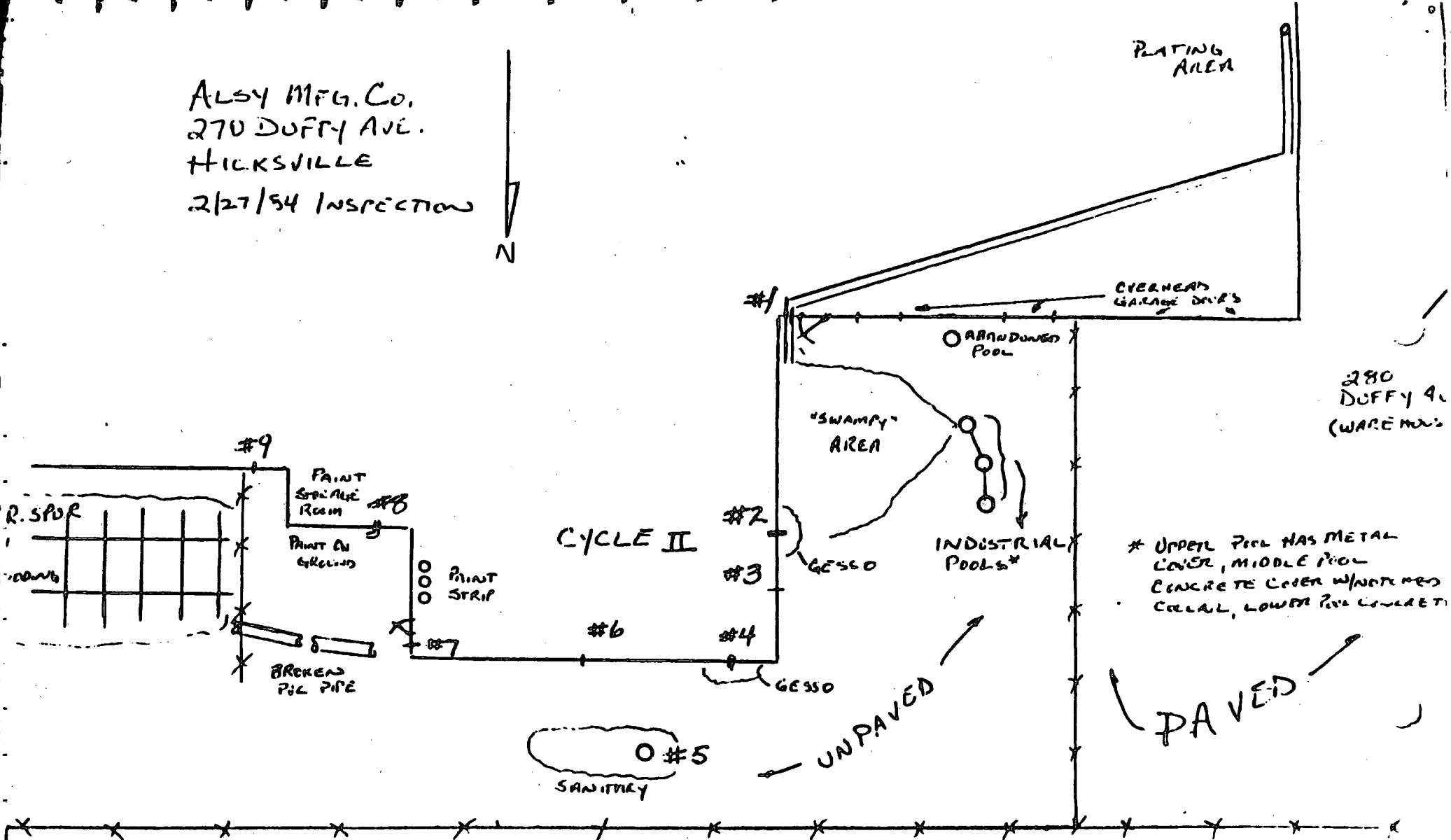
APC & FECAL STREP (COUNTS/ML)

SPEC. COND. (UMHOS) SETT. SOLIDS (ML/L)

DATE REPORTED 3/7/84

J. McLENDON, P.E., LABORATORY DIRECTOR

ALSY MFG. CO.
270 DUFFY AVE.
HICKSVILLE
2/27/54 INSPECTION



LIRR

ENVIRONMENTAL
HEALTH

Continuation Sheet

Nassau County Health Department

Owner or

Agent :

Address:

Inspector

DATE

COMMENTS

will be sent to him outlining our findings and our requirements for correction. He asked if it was alright for him to install a new leaching pool to correct the sanitary overflow. I answered affirmatively with the stipulation that he not fill in the existing pool since samples taken from it by DEC on 2/21/88 might indicate chemical contamination which might require re-excavation. We left the site at approximately 3 PM.

The attached drawing is based on rough field notes and may require revision. It is mainly meant to be an aid in inspection and sampling. Numbered locations on drawing refer to text.

Howard Scheff

DATE

COMMENTS

outside. Two sections of PVC pipe were laying on the ground. These sections pointed toward the railroad siding behind the plant and to the pipe draining this sink. It appeared that this pipe may have been connected to the sink drain at one time.

8- The wall in this area makes another right angle bend and becomes the north wall of the paint storage room. A PVC pipe and elbow were seen protruding from this wall. Inspection of the inside of the wall showed no origin for this pipe. It is believed that this is no longer in use. The ground in this area was partially covered with paint. Some of the area appeared to have been recently cleaned.

9- A second sprinkler drain was noted on a north wall adjacent to the railroad siding.

The railroad siding is below the grade where the inspection took place. A water accumulation was noticed in the siding about to the level of the top of the rails. The water appeared clean.

After the inspection a brief meeting was held in Mr. Ehrenfeld's office. He was told that a letter

DATE

COMMENTS

- 4- Along the north wall of the CYCLE II operation another pipe similar to #2 above was noted. The ground in this area was also covered with "Gesso". This pipe was traced to a double sink inside the building. The operation here is similar to #2 above.
- 5- The sanitary leaching system is located in this area adjacent to the railroad embankment. The leaching pool was overflowing and had created a pond several inches deep in this area.
- 6- Further east along the north wall a sprinkler system drain was noted.
- 7- At the northeast corner of CYCLE II on the east wall another pipe was noted. This was traced to a sink on this wall in the paint stripping area. In this operation glass lamp parts which have been improperly painted are placed first in a drum containing an acid paint stripper. The part is then rinsed with a hose into another drum to remove the acid / paint left on the glass. The drum used for this purpose is an open 55 gallon drum which appeared to have been used many times. Material collected in this drum is removed by a scavenger. The glass part is then washed in the sink. The discharge is to the ground.

00211

Formal Name
Address
City

ALSA MANUFACTURING INC

ADDRESSES:

Report Period:
1/1/55 - 12/31/55

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
WATER	PAINT THINNING	PAINT SUPPLY CO # 126	660g
WATER	PAINT CLEANING + WASHING	PAINT SUPPLY CO # 126	165g
MINERAL SPIRITS	PARTS WASHING	PAINT SUPPLY CO # 126	
PAINT THINNER	PAINT STRIPPING (CLEANING)	FIN PAINT # 126	
NICKEL SOLUTION	NICKEL PLATING	ENGLIST # 475	
NICKEL SOLUTION	NICKEL PLATING	ENGLIST # 475	
BRASS BRASS	BRASS PLATING	ENGLIST # 475	200/bs
COPPER BRASS	BRASS PLATING	ENGLIST # 475	200/bs
BRASS BRASS	BRASS PLATING	ENGLIST # 475	
COPPER SULPHATE	BRASS PLATING	ENGLIST # 475	
PAINT STRIPPER	PARTS STRIPPING (CLEANING)	PAINT SUPPLY CO # 126	660g
NICKEL METAL	ANODES - NICKEL PLATING	ENGLIST # 475	800/bs
BRASS METAL	ANODES - BRASS PLATING	ENGLIST # 475	250/bs
PAINT THINNER	PAINT APPLICATION	AGATEEN #	2255g
TRICHLOROETHANE	DEGREASING	PRIDE #	6875g

FRANCIS T. PURCELL
COUNTY EXECUTIVE



JOHN J. DOWLING, M.D., M.P.H.
COMMISSIONER

FRANCIS V. PADAR, P.E., M.C.E.
DEPUTY COMMISSIONER
DIVISION OF ENVIRONMENTAL HEALTH

NASSAU COUNTY
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD
MINEOLA, NEW YORK 11501

May 6, 1986

Rebecca Ligotino
E A Science and Technology
R.D. 2, Box 91
Goshen Turnpike
Middletown, New York 10940

Re: Alsy Mfg. Co.

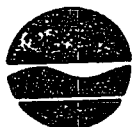
Dear Ms. Ligotino:

After reviewing your interview summary and site sketch I have the following comments:

1. In the first paragraph you indicate that cleanup took place. As far as we are aware the only cleanup was of the three industrial leaching pools. No cleanup or investigation has been conducted of any of the surface areas which received unpermitted discharges or bypasses.
2. In the second paragraph reference is made to the practice of pumping industrial wastes to stormwater drywells. While this was never observed by the Health Department, I believe it was observed by Carl Vernick of Soil Mechanics. This may be a way to confirm this practice.
3. Also in the second paragraph, reference is made to the various colors found in the soil near the paint shop. While these colors may have been caused by paint stripping, it is also possible that metals used in the plating operation may be responsible. We have heard that the plating tanks were drained at times and may have allowed concentrated material to enter the discharge stream.
4. On the drawing, I indicated three areas by asterisks. These were the location of sinks which discharged through pipes onto the ground outside the building. DEC samples of the ground in these areas indicated the presence of lead.

Other than the above comments, the summary is an accurate record of the meeting. Please contact me if you have any questions.

Very truly yours,



New York State Department of Environmental Conservation

MEMORANDUM

TO: [REDACTED] / G. Donohue, NCDH
FROM: A. Yerman
SUBJECT: Alsy Manufacturing Inc: Consent Order
DATE: 9/25/84

Pls. review & comment.

RECEIVED

OCT 3 1984

NASSAU COUNTY
DEPARTMENT OF HEALTH



HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LAB NO. 554815

**WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES**

PROJECT NO. ALSY 85-01

CLIENT'S NAME AND ADDRESS

ALSY MFG. CO.

270 DUFFY AVE

HICKSVILLE, NY

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 4/12/85

EP TOX METALS

COLLECTED BY RSI 03

DATE RECEIVED - 4/12/85

LAB NO.	SAMPLE ID INFORMATION	ARSENIC	BARIUM	CADMIUM	CHROM- IUM	LEAD	MERCURY
554815	FIRST PILE N.W.	<20.0 #	0.40	0.02	<0.02	0.10	<0.50#
554816	PILE #2 EAST	<20.0 #	0.30	<0.02	<0.02	<0.10	<0.50#

REMARKS - ALL BILLS & REPORTS TO RSI

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY * (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
AFC & FECAL STREPS (COUNTS/ML)

DATE REPORTED 1/18/83

On Jan. 11?



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
 MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

LABORATORY REPORT

LAB NO. 554819

PROJECT NO. ALSY 85-01

CLIENT'S NAME AND ADDRESS

ASLY MFG.

270 DUFFY AVE

HICKSVILLE, NY

TYPE OF SAMPLE - INDUSTRIAL WASTE

DATE COLLECTED - 4/12/85

COLLECTED BY RSI 03

DATE RECEIVED - 4/12/85

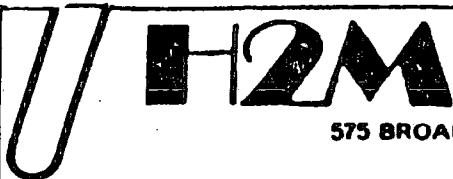
EP TOX METALS
 FILTERED

LAB NO.	SAMPLE ID INFORMATION	SELEN- IUM	SILVER	ALUMI- NUM	NICKEL	COPPER	ZINC
554819	EAST - 1ST POOL	30.0 #	<0.02	<0.20	1.06	3.19	0.06
554820	WEST - 1ST POOL	<20.0 #	<0.02	<0.20	0.23	0.18	0.11
554821	WEST - 2ND POOL	<20.0 #	<0.02	<0.20	0.24	0.37	0.07

REMARKS - ALL BILLS & REPORTS TO RSI

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
 T. COLI BACT. & FECAL COLI (MPN/100ML)
 COLOR, ODOR, TURBIDITY & PH (UNITS)
 APC & FECAL STREP (COUNTS/ML)

DATE REPORTED 4/17/85



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICESLABORATORY
REPORT

LAB NO. 554822

PROJECT NO. ALSY 85-01

CLIENT'S NAME AND ADDRESS

ALSY MFG.

270 DUFFY AVE

HICKSVILLE, NY

TYPE OF SAMPLE - INDUSTRIAL WASTE

DATE COLLECTED - 4/12/85

COLLECTED BY RSI 03

DATE RECEIVED - 4/12/85

SPECIAL WASTE SAMPLES

LAB NO.	SAMPLE ID INFORMATION	SELEN- IUM	SILVER	ALUMI- NUM	NICKEL	COPPER	ZINC
554822	EAST POOL #1	30.0 #	<0.02	0.40	1.46	3.67	0.33
554823	WEST - 1ST POOL	<20.0 #	<0.02	0.20	0.86	0.47	0.23
554824	WEST - 2ND POOL	<20.0 #	<0.02	<0.20	3.56	1.20	0.57
554825	DRY WELL	<20.0 #	<0.02	0.80	0.46	0.14	0.07

REMARKS - ALL BILLS & REPORTS TO RSI

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
T.COLI BACT. & FECAL COLI (MPN/100ML)
COLOR, ODOR, TURBIDITY & PH (UNITS)
APC & FECAL STREP (COUNTS/ML)

DATE REPORTED 4/17/85



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICESLABORATORY
REPORT

LAB NO. 554822

PROJECT NO. ALSY 35-01

CLIENT'S NAME AND ADDRESS

ALSY MFG.

270 DUFFY AVE

HICKSVILLE, NY

TYPE OF SAMPLE - INDUSTRIAL WASTE

COLLECTED BY RSI 03

DATE COLLECTED - 4/12/85

DATE RECEIVED - 4/12/85

SPECIAL WASTE SAMPLES

LAB NO.	SAMPLE ID INFORMATION	ARSENIC	BARIUM	CADMIUM	CHROMIUM	LEAD	MERCURY
554822	EAST POOL #1	42.0 #	<0.20	<0.02	0.02	<0.10	<0.50#
554823	WEST - 1ST POOL	<20.0 #	<0.20	<0.02	0.02	<0.10	<0.50#
554824	WEST - 2ND POOL	<20.0 #	<0.20	<0.02	<0.02	<0.10	<0.50#
554825	DRY WELL	<20.0 #	<0.20	<0.02	<0.02	<0.10	<0.50#

REMARKS - ALL BILLS & REPORTS TO RSI

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
 T. COLI BACT. & FECAL COLI (MPN/100ML)
 COLOR, ODOR, TURBIDITY & PH (UNITS)
 APC & FECAL STREP (COUNTS/ML)

DATE REPORTED 4/17/85



HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS, ENVIRONMENTAL SCIENTISTS and PLANNERS

575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-894-3040

CLIENT NAME AND ADDRESS

Alsy Mfg.
270 Duffy Ave.
Hicksville, NY 11803

Lab. No. 554814
Type Water Misc.
Sampling Pt. Alsy W. Second Pool

Date Sampled 4/12/85
Collected By RSI 03

<u>VOLATILE HALOGENATED</u>	<u>ug/l</u>
vinyl chloride.....	< 10
dichlorodifluoromethane.....	< 10
methylene chloride.....	< 10
trichlorofluoromethane.....	< 10
1,1-dichloroethylene.....	< 10
1,1-dichloroethane.....	< 10
trans-1,2-dichloroethylene.....	< 10
cis-1,2-dichloroethylene.....	< 10
chloroform.....	< 10
1,1,2-trichlorotrifluoroethane.....	< 10
1,2-dichloroethane.....	< 10
1,1,1-trichloroethane.....	< 40
carbon tetrachloride.....	< 10
bromodichloromethane.....	< 10
1,2-dichloropropane.....	< 10
2,3-dichloropropene.....	< 10
trans-1,3-dichloropropene.....	< 10
trichloroethylene.....	< 10
1,1,2-trichloroethane.....	< 10
chlorodibromomethane.....	< 10
cis-1,3-dichloropropene.....	< 10
bromoform.....	< 10
1,1,1,2-tetrachloroethane	< 10
tetrachloroethylene.....	< 10
1,1,2,2-tetrachloroethane.....	< 10
chlorobenzene.....	< 10
<u>VOLATILE NON-HALOGENATED</u>	
benzene.....	< 10
toluene.....	< 10
ethylbenzene	< 10
m-xylene	< 10
p-xylene.....	< 10
o-xylene	< 10

* Reported value represents total.
Results reported meet N.Y.S.
Drinking Water Limits.

Date Reported: 4/17/85

* J. M. McLendon *

S.C. McLendon, P.E.
Laboratory Director



HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS, ENVIRONMENTAL SCIENTISTS and PLANNERS

575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

CLIENT NAME AND ADDRESS

Alsy Mfg.
270 Duffy Ave.
Hicksville, NY 11803

Lab. No. 554813
Type Water Misc.
Sampling Pt. Alsy E. Pool

Date Sampled 4/12/85
Collected By RSI 03

<u>VOLATILE HALOGENATED</u>	<u>ug/l</u>
vinyl chloride.....	< 10
dichlorodifluoromethane.....	< 10
methylene chloride.....	< 10
trichlorofluoromethane.....	< 10
1,1-dichloroethylene.....	< 10
1,1-dichloroethane.....	< 10
trans-1,2-dichloroethylene.....	< 10
cis-1,2-dichloroethylene.....	< 10
chloroform.....	< 10
1,1,2-trichlorotrifluoroethane.....	< 10
1,2-dichloroethane.....	< 10
1,1,1-trichloroethane.....	< 10
carbon tetrachloride.....	< 10
bromodichloromethane.....	< 10
1,2-dichloropropane.....	< 10
2,3-dichloropropene.....	< 10
trans-1,3-dichloropropene.....	< 10
trichloroethylene.....	< 10
1,1,2-trichloroethane.....	< 10
chlorodibromomethane.....	< 10
cis-1,3-dichloropropene.....	< 10
bromoform.....	< 10
1,1,1,2-tetrachloroethane	< 10
tetrachloroethylene.....	< 10
1,1,2,2-tetrachloroethane.....	< 10
chlorobenzene.....	< 10

VOLATILE NON-HALOGENATED

benzene.....	< 10
toluene.....	< 10
ethylbenzene	< 10
m-xylene	< 10
p-xylene.....	< 10
o-xylene	< 10

* Reported value represents total.

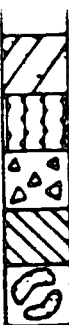
Results reported meet N.Y.S.

Drinking Water Limits.

Date Reported: 4/17/85

* S.C. McLendon - *

S.C. McLendon, P.E.
Laboratory Director

**SOIL MECHANICS DRILLING CORP.**

3770 MERRICK ROAD • SEAFORD, L. I., NEW YORK 11783 • (516) 221-2333

REPORT NO. 84-536CA

CLIENT TUCKER/GELLMAN & MULDERIG ADDRESS 285 Madison Avenue
New York, N.Y. 10017

SAMPLE Water

LOCATION Balatem Corp, Hicksville, N.Y.

SAMPLED BY SOIL MECHANICS DRILLING CORP. DELIVERED BY SOIL MECHANICS
DRILLING CORP.

TYPE TEST Chemical Analysis

SAMPLE NO. REPORT TO TUCKER/GELLMAN & MULDERIG
Att: Mr. J. Gellman

LABORATORY REPORT

<u>RESULTS IN (mg/l)</u>	<u>SAMPLE IDENTIFICATION</u>			<u>ALLOWABLE DISCHARGE STANDARDS</u>
	<u>A</u>	<u>B</u>	<u>C</u>	
Antimony	< 0.10	< 0.10	< 0.10	
Arsenic	0.002	< 0.001	< 0.001	.05
Beryllium	< 0.003	< 0.003	< 0.003	
Cadmium	0.006	< 0.003	< 0.003	.02
Chromium	< 0.010	< 0.010	< 0.010	.10
Copper	0.884	1.149	0.071	1.0
Lead	< 0.025	< 0.025	< 0.025	.05
Mercury	0.0010	0.0009	0.0013	.004
Nickel	1.481	17.180	0.095	2.0
Selenium	0.001	0.001	< 0.001	.04
Silver	< 0.006	< 0.006	< 0.006	.1
Thallium	< 0.05	< 0.05	< 0.05	
Zinc	0.143	0.251	0.081	5.0

< = Less Than

COPIES:

DATED: December 4, 1984

BY:

Carl Vernick, President



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.
575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY REPORT

LAB NO. 461861

PROJECT NO. 2C

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONS.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 8/ 1/84

COLLECTED BY NO 99

DATE RECEIVED - 8/ 1/84

PRIORITY POLLUTANT METALS

DEC I.D. #E-184-207-11

LIQUID SAMPLE

Alsy

PARAM- ETER	RESULT	PARAM- ETER	RESULT
----------------	--------	----------------	--------

ANTY- MONY	<0.20	SELEN- IUM	4.008
---------------	-------	---------------	-------

ARSENIC	90.0 ^{limit 50.0}	SILVER	<0.02
---------	----------------------------	--------	-------

BERYL- LIUM	<0.02	THAL- LIUM	<0.10
----------------	-------	---------------	-------

CADMIUM	<0.02	ZINC	3.67
---------	-------	------	------

CHROM- IUM	0.10		
---------------	------	--	--

COPPER	11.8 ^{limit 1.0}		
--------	---------------------------	--	--

LEAD	96.5 ^{limit 50.0}		
------	----------------------------	--	--

MERCURY	<0.508		
---------	--------	--	--

NICKEL	42.9 ^{limit 2.0}		
--------	---------------------------	--	--

RECEIVED FROM
DIVISION OF
WATER
LABORATORY
WHITE PLAINS

RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND

T. COLI BACT. & FECAL COLI (MPN/100ML)

COLOR, ODOR, TURBIDITY & PH (UNITS)

APC & FECAL STREP (COUNTS/ML)

SPEC. COND. (UNHOS) SETT. SOLIDS (ML/L)

DATE REPORTED 9/19/84

[Signature]
S. C. McLENDON, P.E., LABORATORY DIRECTOR

LIABILITY OF H2M CORP. SHALL BE LIMITED TO THE PRICE OF THE SERVICE RENDERED AND PAID.



HOLZMACHER, McLENDON and MURRELL, P.C. • CONSULTING ENGINEERS, ENVIRONMENTAL SCIENTISTS and PLANNERS
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab No. 461859/461860
Sample: E-184-207-11

Date Sampled: 8/1/84
Collected By: WO 99

PURGEABLE ORGANICS PRIORITY POLLUTANTS

<u>Compound</u>	<u>ug/l</u>	
Chloromethane	ND	Method limit of detection: low than 10 ug/l.
Bromomethane	ND	
Vinyl Chloride	ND	Quantification limit: 10 ug/l.
Chloroethane	ND	
Methylene chloride	NA	ND - Not detected.
Trichlorofluoromethane	ND	
1,1-dichloroethene	ND	* - Detected, but less than 10 ug/l.
1,1-dichloroethane	ND	
Cis/Trans-1,2-dichloroethene	ND	1) Method limit of detection lower than 100 ug/l.
Chloroform	190	
1,2-dichloroethane	ND	NA - Not Analyzed due to high background interference.
1,1,1-trichloroethane	ND	
Carbon Tetrachloride	ND	
Bromodichloromethane	170	
1,2-dichloropropane	ND	
Trans-1,3-dichloropropene	ND	
Trichloroethene	ND	
Dibromochloromethane	ND	
1,1,2-trichloroethane	ND	
Cis-1,3-dichloropropene	ND	
Benzene	70	
2-chloroethylvinyl ether	ND	
Bromoform	ND	
1,1,2,2-tetrachloroethane	ND	
Tetrachloroethene	ND	
Toluene	780	
Chlorobenzene	ND	
Ethylbenzene	55	
Acrolein	1) ND	
Acrylonitrile	1) ND	

Date Reported: 9/27/84

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

***** OCT 22 1984 *****
*
*
*

S.C. McLendon, P.E.
Laboratory Director



Environmental Engineers & Scientists

HOLZMACHER, McLENDON and MURRELL, P.C.

575 BROAD HOLLOW ROAD, MELVILLE, NEW YORK 11747 (516) 694-3040

LABORATORY
REPORT

LAB NO. 161864

PROJECT NO. 2C

WATER RESOURCES • WATER SUPPLY & TREATMENT • SEWERAGE & TREATMENT • ECOLOGICAL & IMPACT STUDIES
MODEL STUDIES • PILOT PLANT STUDIES • WATER/WASTE WATER LABORATORY AND ANALYTICAL SERVICES

CLIENT'S NAME AND ADDRESS

N.Y.S. DEPT. OF ENV. CONS.

50 WOLF ROAD

ALBANY, NY 12233

TYPE OF SAMPLE - MISCELLANEOUS

DATE COLLECTED - 8/ 1/84

COLLECTED BY WO 95

DATE RECEIVED - 8/ 1/84

PRIORITY POLLUTANT METALS

DEC L.D. #E-184-207-13

LIQUID SAMPLE

Asy

PARAM-ETER	RESULT	PARAM-ETER	RESULT
------------	--------	------------	--------

ANTI-MONY	<0.20	SELENIUM	<2.000
-----------	-------	----------	--------

ARSENIC	22.0 #	SILVER	<0.02
---------	--------	--------	-------

BERYL-LIUM	<0.02	THAL-LIUM	<0.10
------------	-------	-----------	-------

CADMIUM	<0.02	ZINC	1.85
---------	-------	------	------

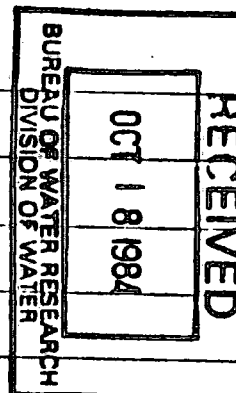
CHROMIUM	0.03		
----------	------	--	--

COPPER	4.38		
--------	------	--	--

LEAD	3.100		
------	-------	--	--

MERCURY	<0.50#		
---------	--------	--	--

NICKEL	68.0		
--------	------	--	--

limit
1.0limit
7.0
 RECEIVED FROM NYSDC
DIVISION OF ENVIRONMENTAL
LABORATORY
WHITE PLAINS

ALL RESULTS IN (MG/L) EXCEPT AS NOTED BY # (UG/L) OR % (PERCENT) AND
 T.COLI BACT. & FECAL COLI (MPN/100ML)
 COLOR, ODOR, TURBIDITY & PH (UNITS)
 APC & FECAL STREP (COUNTS/ML)
 SPEC.COND. (UMHOS) SETT.SOLIDS (ML/L)

DATE REPORTED 9/19/84

S. McLendon, P.E. LABORATORY DIRECTOR



HOLZMACHER, McLENDON and MURRELL P.C. • CONSULTING ENGINEERS, ENVIRONMENTAL SCIENTISTS and PLANNERS
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

CLIENT NAME AND ADDRESS

N.Y.S. DEC
50 Wolf Road
Albany, NY 12233

Lab No. 461862/461863
Sample: #E-184-207-13

Date Sampled: 8/1/84
Collected By: WO 99

PURGEABLE ORGANICS PRIORITY POLLUTANTS

<u>Compound</u>	<u>ug/l</u>	
Chloromethane	ND	Method limit of detection: lower than 10 ug/l.
Bromomethane	ND	
Vinyl Chloride	ND	
Chloroethane	ND	Quantification limit: 10 ug/l.
Methylene chloride	NA	
Trichlorofluoromethane	ND	ND - Not detected.
1,1-dichloroethene	NA	
1,1-dichloroethane	ND	* - Detected, but less than 10 ug/l.
Cis/Trans-1,2-dichloroethene	ND	
Chloroform	380	1) Method limit of detection lower than 100 ug/l.
1,2-dichloroethane	ND	
1,1,1-trichloroethane	NA	
Carbon Tetrachloride	ND	NA - Not Analyzed due to high background interference.
Bromodichloromethane	190	
1,2-dichloropropane	ND	
Trans-1,3-dichloropropene	ND	
Trichloroethene	ND	
Dibromochloromethane	ND	
1,1,2-trichloroethane	ND	
Cis-1,3-dichloropropene	ND	
Benzene	88	
2-chloroethylvinyl ether	ND	
Bromoform	ND	
1,1,2,2-tetrachloroethane	ND	
Tetrachloroethene	ND	
Toluene	2500	
Chlorobenzene	ND	
Ethylbenzene	34	
Acrolein	1) ND	
Acrylonitrile	1) ND	

Date Reported: 9/27/84

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

★ *PS* ★

S.C. McLendon, P.E.
Laboratory Director

ENVIRONMENTAL
HEALTH

Continuation Sheet

Nassau County Health Department

Owner or

Agent :

Address:

Inspector

DATE

COMMENTS

industrial pools, one with a metal cover two with concrete covers. On one of the concrete covered pools it was noticed that the cement collar had been notched to allow any overflow to occur beneath the cover. An old unused leaching pool was inspected. This was adjacent to the north wall and appeared to have been partially backfilled. Some of the visible concrete portion of this pool was seen to have a blue-green color.

2- North of the PVC Pipe along the ~~west~~^{west} wall of the CYCLE II part of the building we noticed a smaller pipe exiting the building wall about 12" above ground level. The ground beneath the pipe was covered with a white powder called "Gesso". Inside the origin of this pipe was seen to be the drain from a double sink. As noted in R. Willis' 2/22/84 note this sink is used in the preparation of glass lamp parts.

3- Further along this same wall approximately 10-15' above the ground a small 3/4" pipe was noted protruding through a window. Steaming water was discharging from this pipe. This pipe was traced inside to the steam heating system. The discharge appeared to be condensate.

Owner or
Agent : ALSY MFG. Co. (CYCLE II)
Address: 270 JUFFY AVE
HICKSVILLE

Inspe

DATE

COMMENTS

On 2/27/84 at 1:45 PM R. Willis and H. Schaefer inspected this site to prepare a drawing of the ~~last~~ unpermitted discharge points noted in inspections on 2/21/84 and 2/22/84. We met Jack Ehrenfeld who conducted a tour of the operation leading to each discharge.

1 - 2"-3" DIAMETER PVC PIPE LOCATED AT REAR OF ALSY OPERATION

This pipe was actively discharging at the time of the inspection. It originates on the west wall of the building behind the plating tanks. The tanks are on a raised platform adjacent to the wastewater treatment system. A trench surrounds this area and is used to receive the discharge from the treatment system as well as any over spray from rinsing or any other spilled material. Liquid collected in the trench runs by gravity under the floor to the industrial leaching system which consists of three pools in series. When the leaching system becomes overloaded a pump is turned on and the contents of the trench are pumped through this pipe up, across the ceiling and over to its exit point on the north wall adjacent to a door. The discharge from the pipe runs across the ground and pools. A swampy area has been created by this discharge as noted in R Willis' report of 2/22/84. Inspection of this area revealed the following - There are three.

MEMORANDUM

NASSAU COUNTY DEPARTMENT OF HEALTH

240 Old Country Road

Mineola, New York 11501

Appendix 1.14

To : Peter Mancuso
Assistant District Attorney

Date: May 23, 1984

From : Department of Health

Received from:
Nassau Co. Dept. of Health

Subject : Alsy Manufacturing Co., Hicksville

In accordance with your recent request for a site diagram of the above reference company, to help determine the locations of DEC sampling points noted in the DEC inspection report of Bob Gillo and William O'Brien, attached is a copy of an NCHD continuation sheet describing a 2-27-84 inspection at Alsy. Part of the inspection report is a site diagram describing the location of various spills and disposal systems.

While the attached diagram does not specifically note the DEC sampling locations by number, it should be of some help. If not, I suggest you speak directly to Howard Schaefer (ext. 2264) of this department's Bureau of Land Resources Management, since he is the most familiar with this site and DEC's actions.

Gerard E. Donohue

Gerard E. Donohue, M.C.E., P.E.
Deputy Director
Division of Environmental Health

GED:sp
Attach.

RECEIVED

MAY 24 1984

NCDH
BLRM

ENVIRONMENTAL
HEALTH

Continuation Sheet

Nassau County Health Department

Owner or

Agent :

Address:

270 Duffy Ave Hicksville

Inspector

DATE

COMMENTS

At the rear of the building three drums were full of what seemed to be paint waste. The drums were not labeled. They were on bare ground and it appeared that paint waste was being dumped or overflowed onto the ground. At this area a trench was dug and liquid waste would flow through the trench and into the water that had accumulated in the railroad spur area.

It appeared that when these 55 gal drums were full, that they had been tipped over and the paint ran out into the trench.

This paint waste originates from the operation by the name of Cycle II Corporation. It is in the same bldg. as Alcy. ⁽⁸²²⁾ ~~Also~~ Mr. Joseph STEVENS (2610) (Vice President) of Cycle II was present during the inspection of his operation.

After the inspection Mr. O'Brien + Mr. Gillo and myself came back to the office and conferred with J. J. Somers.

H. K. Wells

ENVIRONMENTAL
HEALTH

Continuation Sheet

Nassau County Health Department

Owner or
Agent :

Address:

230 Duffy Ave. Hicksville

Inspector

DATE

COMMENTS

Today 2/22/84 it was not discharging. However there was a wet : swampy area approx several inches deep and in 25' x 25' ft. space. Mr. O'Brien & Hills stated they were told by Mr. Ehrenfeld it was a 'roof drain' that was discharging rain water that had accumulated on the roof. Today Mr. Ehrenfeld stated he had said that he went the pvc pipe ran across the roof and the water coming out was from : a : operation inside. The source of the pipe was traced to overflow pits in their plating operation. It appeared that untreated plating solutions would overflow and : collect in these pits. Where a float operated pump would pump it thru the pipe that was approx 150' long and run along the roof inside.

Two smaller discharge pipes were found and their : rips traced to two shop sinks inside. Workers would decorate glass lamps with a compound called "Hesso" which was like a thick paint. The compound was put on rogs and the worker would decorate the lamps with the rogs. Often employees would go : to the sinks and wash their rogs and hands : with this "Hesso" compound. Mr. O'Brien & Mr. Hills went to contact the worker and get the formulation products of "Hesso".

ENVIRONMENTAL
HEALTH

Continuation Sheet
Nassau County Health Department

Owner or
Agent :

Address:

230

230 Duff Ave Hicksville

alsey
Gen. Cons.

Appendix 1.1-13

DATE

COMMENTS

2/2/82

at their request I met Bill O'Brien and
Bob Little both from DEC.

Received from:
Nassau Co. Dept. of Health

They had been to alsey on the 21st of Feb
they stated it was a routine type of inspection.
They had checked several industries in Nassau County.

Upon their inspection they stated approx 4-5
pipes were coming out of the plant and
discharging liquid on the top of the ground.
The discharges were all located in the rear of
the factory on the north and west sides.

They also found 2 leaking pots that were near
overflowing. A sanitary pool was
overflowing at the time, a trench was dug to
suck the sanitary waste to drain onto a
railroad spur. The railroad spur was in a low
area and the water level was above the tracks.

This pool that was formed was approx. 4' x 15'.

6 liquid samples, and two soil samples
were taken at this time on 2/2/82


A reinspection was made to determine the source of the
pipes that were coming thru the wall of the plant.
Present was Mr. Jack Elmerfeld plant manager.


One of the drainage pipes (PVC) approx 3" diameter
was discharging a greenish liquid yesterday (2/2/82) onto
the ground as stated by Bill O'Brien, + Bob Little,

SAMPLES COLLECTED BY NYSDEC
at Alsy Mfg. Co., 270 Duffy Ave.
Hicksville on February 21, 1984

<u>Sample Number</u>	<u>Location</u>	<u>Constituents Found</u>
E-184-207-01	First Industrial Leaching Pool Received from: Nassau Co. Dept. of Health	1,1 Dichloroethane 1,1,1 Trichloroethane Toluene Ethylbenzene Copper Lead Nickel Zinc
E-184-207-02	Plating Line Overflow	1,1 Dichloroethane 1,1,1 Trichloroethane Toluene Ethylbenzene Arsenic Copper Lead Nickel Zinc
E-184-207-03	Second Industrial Leaching Pool	Copper Lead Nickel
E-184-207-04	Sanitary Leaching Pool	Lead Toluene
E-184-207-05	Ditch Near Paint Shop	Toluene Ethylbenzene
E-184-207-06	Paint Shop Discharge	Methylene Chloride
E-184-207-07	Pipe on West Side of Cycle II	Cadmium Chromium Lead
E-184-207-08	Pipe on North Side of Cycle II	Cadmium Chromium Lead

On the south side of the ditch, at the top of the embankment, it appeared that white paint had been poured on the ground and vegetation. This paint spill had not been observed in previous inspections. The railroad siding area was still flooded. The waste paint drums had been removed from the outside of the paint shop. Sections of pipe that had previously been scattered around the north side of the building were now lined up on the ground from the paint shop discharge pipe to the embankment above the railroad siding. It appeared as if they intend to pipe this discharge to the siding area.


Robert Gillo
Engineering Technician


William O'Brien
Engineering Technician

Subsequently a discussion was held with Mr. Ehrenfeld and Mr. Stevens in which the following was pointed out that:

1. The overflowing cesspool must be stopped and corrected.
2. The paint waste should not be poured on the ground and that the drums must be kept covered. It was also pointed out that the area should be bermed. When questioned as to how these drums were removed to the drum storage area without spilling, Mr. Stevens stated he didn't know. The drums had two 3 to 4" holes cut in the top and were filled to within a couple of inches of the top.
3. The sink drains could not simply run through a wall and discharge on the ground. They had to be properly connected to a leaching pool.

After leaving Mr. Ehrenfeld and Mr. Stevens, we went back to the north side of the building with Mr. Willis and took further photographs.

On February 24, 1984 we returned to the site to observe if any progress had been made and to take additional photographs. Mr. Ehrenfeld told us that the overflowing sanitary pool had been pumped out and that he had contracted for the installation of a second pool. He also stated that he was taking bids for either connecting the plating shop overflow to the existing SPDES pools or adding another pool. When questioned about the treatment of the plating discharge, Mr. Ehrenfeld stated that the discharge was treated in tanks in the plating area before it entered the trough in the floor.

We then went around back and observed discharge from the pipe from the plating area. It appeared that a truck had been driven across the back yard to the area of the overflowing sanitary pool. The cover of the sanitary pool was now under water, and the well defined ditch of the previous days had been obliterated. There was now a large irregularly shaped flooded area on the north side of the building. It appeared that the sanitary pool was still overflowing as bubbles were rising from the partially ajar lid, but it could not positively be determined if it was the source of the water as it had rained the previous night and was still raining while we were there. The ditch itself was partially filled in down to the area of the paint shop. The pipe from the paint shop was still discharging. The ditch from this pipe north to the main ditch was still flooded and was approximately four feet of the main ditch east of this. Beyond this point, the main ditch was filled in, and concrete rubble had been used to block it at the top of the embankment above the railroad siding.

On February 22, 1984, we returned to the site and went around the north side of the building and took several pictures, all discharges were as on the previous day. When we were near the paint area we were discovered by a plant employee. We then left the site. We meet Robert Willis of the NCDH in front of the building and entered the plant for an inspection. Mr Ehrenfeld took us through the plant. We traced the pipe we previously were told was a roof drain to the area between the plating tanks and the wall. Mr. Ehrenfeld denied telling us it was a roof drain and stated it was an overflow from the trough surrounding the plating area. He also stated it came from a submersible pump in the trough and was treated before discharge. However, this did not seem possible as the pipe appears to simply go from the pump in the trough up to the roof, along the rafters and out the north wall. We then took Mr. Ehrenfeld out and showed him what we had found outside the previous day.

The pipe from the plating area was not discharging. The double pipes on the west wall showed a whitish liquid discharge from one pipe. He stated that these other discharges were from the area occupied by the Cycle II Division. He then took us into this area and introduced us to Joseph Stevens who is Vice President of the Cycle II Division. Mr. Stevens took us through his area. The pipes with the whitish material below them all appear to be hooked into two sinks, which are used to clean up rags and the workers' hands in an area where brass is used to decorate lamp bases. We were told the reason these discharges simply went through the wall, was that they were told to do so previously by a consulting engineer. The small pipe coming out the window discharging hot water is a bleed from the heating system. The pipe discharging in the paint area is also a drain from two sinks in a paint shop, but it was not made clear to us what is washed. At the time we made the inspection they were washing glass cases for lamps with soap and water. When showed the mess outside the paint shop and the waste paint drums, Mr. Stevens said the mess would be cleaned up and told a worker to cap the drums. At this time we had noticed that someone tried to clean up the excess paint which was on the ground 20 minutes prior to this point. Mr. Stevens claimed to have no knowledge of who tried to clean up the paint mess, and he also stated he had no idea the leaching pool was overflowing or who dug the trench. However, he did confirm it was sanitary waste. Mr. Ehrenfeld then showed us an area on the south side of the building where waste is stored until removed by a scavenger. The area was not bermed, some drums were in a fenced enclosure, while others were not. Most of the approximately 10-12 drums appeared to be properly labeled. We were told that spills occur monthly (Do they need a Part 360 Permit?) The area of the drum storage showed a greenish stain on the asphalt of a copper as nickle oxide color and several stains of varying colors which appeared to be recent. There was another heating system bleed in this area, but the puddle below it was of an opaque, light green color as described above.



FRANCIS T. PURCELL
County Executive

NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

Appendix 1.1-24
JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

September 27, 1984

Dennis W. Cole
New York State Department
of Environmental Conservation
SUNY, Building 40 - Room 219
Stony Brook, N.Y. 11794

Re: Alsy Mfg. Co.
SPDES NY 0102539

Dear Mr. Cole:

This office has reviewed the draft renewal SPDES Permit for this facility.

We object to the renewal of this permit for the following reasons:

1. Alsy is currently in violation of the following regulation - ECL 17-0803; ECL 17-0505; ECL 17-0501; Part II Sec. 5 & 9 of the SPDES Permit. These violations were outlined in a proposed consent order on July 20, 1984 by A. Yerman.
2. The draft renewal does not address these existing violations.
3. Public sewers are available for this discharge. Alsy is required by the Nassau County Public Health Ordinance to connect the discharge to the sewer by May 1985. We feel that any permit issued in this situation should not run beyond the mandatory sewer connection date. This was recently done in the case of Depew Mfg. Co., also in Hicksville.

Please contact this office at 535-2406 if you require additional information.

Very truly yours,

Howard Schaefer
Howard Schaefer
Bureau of Land Resources
Management

HS:no

CC: G. Robin, NYSDEC



NASSAU COUNTY
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

BOARD OF HEALTH

BRUCE A. LISTER
CHAIRMAN
NORMA J. HENRIKSEN
VICE CHAIRMAN
LAWRENCE RAVICH, M.D.
SAMUEL M. GELFAND, M.D.
JOAN L. CAEMMERER

JOHN J. DOWLING, M.D., M.P.H.
COMMISSIONER

May 1, 1984

Harold D. Berger, Director
Region I - New York State
Department of Environmental Conservation
SUNY - Building 40
Stony Brook, New York 11794

Received from:
Nassau Co. Dept. of Health

Re: Alsy Mfg. Co., Hicksville, N.Y.
Violation of SPDES Permit NY0102539

Dear Mr. Berger:

On February 21, 22 and 27, 1984 NYSDEC and NCHD inspectors observed Alsy Manufacturing Company in Hicksville discharging industrial wastewater from points not covered in their SPDES Permit. Four unpermitted discharge points were noted as well as possible contamination of the ground by chemical wastes including paint.

As a result, this matter is being referred for appropriate legal action. Details of our inspections are provided in the attached "Data Supporting Request for Legal Action."

If you have any questions, please contact our Bureau of Land Resources Management at 535-2406.

Sincerely yours,

John J. Dowling, M.D., M.P.H.
Commissioner

JJD:HS:sp

cc: R. Cacciatore, Commerce & Industry
Denis Dillon, NCDA (w/enc.)
G. Cusick, Hicksville W.D.
J. Ehrenfeld, Alsy Mfg. Co.



NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

Appendix 1.1-11

JOHN J. DOWLING, M.D., M.P.H.
Commissioner

FRANCIS V. PADAR, P.E., M.C.E.
Deputy Commissioner
Division of Environmental Health

FRANCIS T. PURCELL
County Executive

December 13, 1983

Mr. Jack Ehrenfeld, General Manager
Alsey Mfg. Co.
270 Duffy Avenue
Hicksville, N.Y. 11801

Received from:
Nassau Co. Dept. of Health

Dear Mr. Ehrenfeld:

Recently a sample was collected of your industrial wastewater discharge. Analysis of this sample for organic chemicals shows it to contain certain chemicals in concentrations exceeding allowable amounts.

<u>Constituent</u>	<u>Allowable Limit</u>	<u>Test Result</u>
Methylene Chloride	50 ug/l	63 ug/l
Total Organics*	100 ug/l	154 ug/l

*Includes chloroform 9 ug/l, 1,1,1 trichloroethane 30 ug/l, toluene 39 ug/l, xylene 13 ug/l.

A copy of the test result has been enclosed for your reference. Please investigate the source of this contamination and take measures to eliminate it. Contact this office by December 28, 1983 to report on your success.

Analysis of the sample for inorganic chemicals has not been completed. The results will be forwarded to you when they are received by this office.

I may be contacted at 535-2284 if you have any questions.

Very truly yours,


Howard Schaefer
Bureau of Land Resources Management

HS:no
Enc.

LABORATORY REPORT

CHEMICAL EXAMINATION OF IN AND HAZARDOUS WASTES

Division of Laboratories and Research
Nassau County Department of Health

- 1 ☒ Routine
- 2 ☐ Resample
- 3 ☐ Special
- 4 ☐ Complaint
- 5 ☐ Other

L. No.

13926

Field No.

VN 302

Source Information (Please Print)

Premises

Alsu M-50

Address

Duffin Ave

Town

Wicksville

Collection Point

Designation

Month

Day

Date Collected

11

17

Date Received

Date Reported

Collection Time

Time

9:42

Collected By:

Sampler's Comments:

Bureau:

- 1 ☒ Land Resources Management
9 ☐ Other (specify)

Sample Type:

- A ☒ Water D ☐ Waste Solv
B ☐ Soil E ☐ Oil
C ☐ Sludge F ☐ Other

CHEMICAL EXAMINATION

SPECIAL ANALYSIS

Check	Metals	Result	Check	Non-Metals	Result	Check	Constituent	Re
1	Aluminum mg/l	400.0	15	Chloride mg/l	43.8	29	Chromium hex. mg/l	
2	Arsenic mg/l	0.06	16	Cyanide mg/l		30		
3	Barium mg/l	<0.5	17	Fluoride mg/l	<0.20	31		
4	Cadmium mg/l	<0.001	18	MBAS mg/l	0.06	32		
5	Chromium, Total mg/l	<0.01	19	pH	4.3	33		
6	Copper mg/l	3.05	20	Phenols mg/l		34		
7	Iron, Total mg/l	5.82	21	Solids, Suspended mg/l		35		
8	Lead mg/l	<0.01	22	Solids, Total Dm. mg/l	13.2	36		
9	Manganese mg/l	<0.05	23	Sulfate mg/l	870	37		
10	Mercury mg/l		24	Ammonia nitrogen mg/l	0.23	38		
11	Nickel mg/l	1.00	25	Kjeldahl nitrogen mg/l	0.5	39		
12	Selenium mg/l	<0.005	26	Nitrite nitrogen mg/l	0.217	40		
13	Silver mg/l	0.10	27	Nitrate nitrogen mg/l	6.6	41		
14	Zinc mg/l	0.30	28	Total Phos. mg/l		42		

Examiner's Comments

BOTTLE NOT SUBMITTED FOR PHENOL.
BOTTLE NOT SUBMITTED FOR CYANIDE.

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

2-11

HALOGENATED - GASES

HAZ
(PPM)

RESULTS
(PPM)

CHLOROMETHANE	NA	NA
DICHLORODIFLUOROMETHANE	NA	NA
BRONUMETHANE	NA	NA
VINYL CHLORIDE	10	NA
CHLOROETHANE	NA	NA

VOLATILE HALOGENATED

METHYLENE CHLORIDE	4	63
TRICHLOROFUOROMETHANE	1	1
1,1-DICHLOROETHYLENE	1	1
1,1-DICHLOROETHANE	4	4
1,1,2-DICHLOROETHYLENE	1	4

TRICHLOROETHANE	1	9
1,1,2-TRICHLOROTRIFLUOROETHANE	1	1
1,1,2-TRICHLOROETHANE	4	4
1,1,1-TRICHLOROETHANE	1	30
PERMETHYLCHLORIDE	1	1
1,1-DICHLOROPROPANE	11	11

1,1-DICHLOROMETHANE	1	1
TRICHLOROETHYLENE	1	1
1,1,2-DICHLOROPROPENE	1	1
1,1-DICHLOROMETHANE	1	1
1,1,2-TRICHLOROETHANE	1	1

1,1,2-DICHLOROPROPENE	NA	NA
TRICHLOROETHANE	1	1
1,1,2-TRICHLOROETHANE	1	1
1,1,2-TRICHLOROETHANE	NA	NA

HALOGENATED

ETHYLENE	4	4
PROPYLENE	4	30
CHLOROBENZENE	4	4
ETHYLBENZENE	4	4
ISOBUTYLENE (G.M.P.)	4	10
DICHLOROPHENYLENE (G.M.P.)	8	8

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

NASSAU COUNTY DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES & RESEARCH
ENVIRONMENTAL HEALTH LABORATORIES

RESULTS OF EXAMINATION

RECEIVED FROM NYSDEC
DIVISION OF ENVIRONMENTAL
ENFORCEMENT
WHITE PLAINS

REPORTING LAB: TRACE ORGANICS

LAB ACCESS NO.: 302096

SOURCE: ALSTY MFG. - DUFFY AVE., HICKSVILLE

MATRIX: WATER

DATE SAMPLED: 11/17/83

ND - MINIMUM REPORTABLE CONCENTRATION

NA - NOT ANALYZED

NR - NO RESULT DUE TO TECHNICAL REASONS-RE-SAMPLE SUGGESTED

MEMORANDUM

Appendix 1.1-9

NASSAU COUNTY DEPARTMENT OF HEALTH

240 Old Country Road

Mineola, New York 11501

To : Files

Date: May 8, 1981

From : Joseph Schechter

Received from:
Nassau Co. Dept. of Health

Subject : Alsy Mfg. Co., Hicksville

On 5/5/81 at 9:30 A.M., a meeting was held at the above site to discuss a monitoring program for chlorinated hydrocarbons. Mr. Ehrenfeld was given a copy of an analysis of a sample of wastewater collected on 3/24/81 showing effluent violations for chloroform and trichloroethylene (107 ug/l & 179 ug/l respectively).

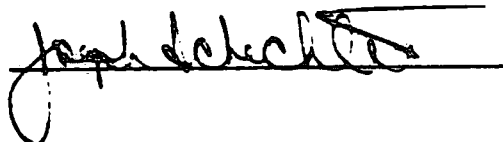
Mr. Ehrenfeld believes that both are caused by inadvertent spillage next to the discharge trough where a tank is used to remove paint from rejected lamp parts. The solution contained within is a proprietary mixture from Patlin Chemical.

Analysis by NCDH on 3/24/81 eliminated 1,1,1-Trichloroethane as a problem. Discharge was within effluent limits. This is the only chlorinated compound currently in use for degreasing prior to plating. Since analysis has revealed that organic chemicals are not entering the cleaning tank rinse water, and since all parts are first cleaned in this tank, contamination is either being caused by spillage, a by-product of cyanide destruction by alkaline chlorination; or contained within proprietary chemicals.

Mr. Ehrenfeld has already taken one sample in April for organic analysis. It was agreed another sample will be taken in May. If 2 monthly samples are negative for organics, sampling may be discontinued, pending verification by NCDH sampling.

A review of the March 30, 1981 analysis by Alsy revealed discharge in violation of permit conditions. This was explained as the result of the caustic feed pump seal failing. It has been repaired. A spare pump is available on site.

JS/ceg



Date: February 13,

ny
NEW YORK TESTING LABORATORIES, INC.
P.O. BOX 484, 81 URBAN AVENUE, WESTBURY, L.I., N.Y. 11590 • (516) 334-7770 • (212) 297-1449

REPORT OF TESTS

Client — 79-56394 (S) - Alsy Manufacturing Inc.
Material — Four (4) Water Samples
Client's Order No. — Verbal
Identification — Sample Received Month of January - 1981
Submitted for — Chemical Analysis

We find as follows:

	1/6/81 12:00	1/13/81 9:25 Plating	1/20/81 10:25 Plating	1/27/81 9:10 Plating	
pH at 20 deg. C.	9.85	7.69	6.24	7.99	7.99
<u>Results in mg/l</u>					
Copper	< 0.011	0.484	1.102	7.387	2.25
Nickel	0.087	0.870	2.391	6.891	2.32
Zinc	0.031	0.152	0.334	1.552	1.517
Total Nitrogen	5.20	17.43	14.19	52.15	27.2
Cyanide	0.12	0.25	0.21	0.22	1.30

< None detected, less than

To:

Alsy Manufacturing, Inc.
270 Duffy Avenue
Hicksville, New York 11802

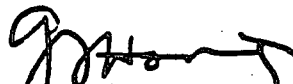
Att: Mr. Jack Ehrenfeld

mg

We certify that this report is a true report of results obtained from our tests of this material.

Respectfully submitted,

NEW YORK TESTING LABORATORIES, INC.


G. J. Horvitz, Chief Officer

Report on sample by client applies only to sample. Report on samples by us applies only to lot sampled.
Information contained herein is not to be used for reproduction except by special permission.
Samples retained for thirty days maximum after date of report unless specifically requested otherwise by client. The liability of the New York Testing Laboratories, Inc. with respect to the services charged for herein, shall in no event exceed the amount of the invoice.

Date: December 17, 1980

NEW YORK TESTING LABORATORIES, INC.

P.O. BOX 484, 81 URBAN AVENUE, WESTBURY, L.I., N.Y. 11590 • (516) 334-7770 • (212) 297-1449

REPORT OF TESTS

Client — 79-56394 (Q) - Alsy Manufacturing Inc.
Material — Three (3) Water Samples
Client's Order No. — Verbal
Identification — Sample Received 12/5 & 12/9/80
Submitted for — Chemical Analysis

Dec 1980

We find as follows:

	<u>11/25/80</u> <u>9:45 Plating</u>	<u>12/5/80</u> <u>9:50 Plating</u>	<u>12/9/80</u> <u>9:50 Plating</u>	<u>~</u>
pH at 20 deg. C.	12.75	8.92	9.42	9.17
<u>Results in mg/l</u>				
Copper	0.122	0.244	0.322	.283
Nickel	0.455	0.682	0.591	.637
Zinc	0.140	0.345	0.162	.254
Total Nitrogen	12.47	13.15	35.12	24.14
Cyanide	1.20	< 0.02	0.25	.135

< None detected, less than

To:

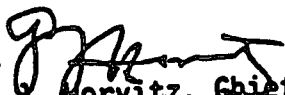
Alsy Manufacturing, Inc.
270 Duffy Avenue
Hicksville, New York 11802

Att: Mr. Jack Ehrenfeld
eas

We certify that this report is a true
report of results obtained from our
tests of this material.

Respectfully submitted,

NEW YORK TESTING LABORATORIES, INC.


G. S. Horvitz, Chief Officer

Report on sample by client applies only to sample.

Report on samples by us applies only to lot sampled.

Information contained herein is not to be used for reproduction except by special permission.
Samples retained for thirty days maximum after date of report unless specifically requested otherwise by client. The liability of the New York Testing Laboratories, Inc. with respect to the services charged for herein, shall in no event exceed the amount of the invoice.

Date: November 29, 1980

Appendix 1.1-8

NEW YORK TESTING LABORATORIES, INC.

P.O. BOX 484, 81 URBAN AVENUE, WESTBURY, L.I., N.Y. 11590 • (516) 334-7770 • (212) 297-1449

REPORT OF TESTS

Client — 79-56394 (P) - Alsy Manufacturing Inc.
Material — Three (3) Water Samples
Client's Order No. — Verbal
Identification — Sample Received (Month of November, 1980)
Submitted for — Chemical Analysis

Received from:
Nassau Co. Dept. of Health

We find as follows:

	11/4/80 9:20 <u>Plating</u>	11/11/80 10:00 <u>Plating</u>	11/18/80 9:10 <u>Plating</u>
pH at 20 deg. C.	9.33	7.10	6.40
<u>Results in mg/l</u>			
Copper	4.159	0.611	38.85
Nickel	0.263	0.386	6.596
Zinc	0.689	0.311	1.208
Total Nitrogen	5.01	4.39	83.49
Cyanide	< 0.02	0.03	12.50

< None detected, less than

To:

Alsy Manufacturing, Inc.
270 Duffy Avenue
Hicksville, New York 11802

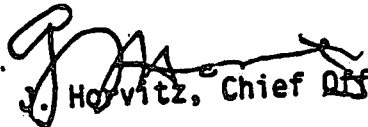
Att: Mr. Jack Ehrenfeld

ees

We certify that this report is a true report of results obtained from our tests of this material.

Respectfully submitted,

NEW YORK TESTING LABORATORIES, INC.


G. J. Horvitz, Chief Officer

Report on sample by client applies only to sample.
Information contained herein is not to be used for reproduction except by special permission.
Samples retained for thirty days maximum after date of report unless specifically requested otherwise by client. The liability of the New York Testing Laboratories, Inc. with respect to the services charged for herein, is limited to the amount of the invoice.

LABORATORY REPORT

CHEMICAL EXAMINATION OF INDUSTRIAL
AND HAZARDOUS WASTESDivision of Laboratories and Research
Nassau County Department of Health

- 1 ☒ Routine
2 ☐ Resample
3 ☐ Special
4 ☐ Complaint
5 ☐ Other

Lab. No.

13920

Field No.

VN 382

Source Information (Please Print)

Premises

Alsy Mfg

Address

Duffy Ave

Town

Hicksville

Collection Point

Collection trench

Month

Day

Date Collected

11

Date Received

Date Reported

Collection Time Comp : 9:15

Collected By: V. Nigro

Sampler's Comments:

Bureau:

- 1 ☒ Land Resources Management
9 ☐ Other (specify)

Sample Type:

- A ☒ Water D ☐ Waste Solvent
B ☐ Soil E ☐ Oil
C ☐ Sludge F ☐ Other

CHEMICAL EXAMINATION

SPECIAL ANALYSIS

Check	Metals	Result	Check	Non-Metals	Result	Check	Constituent	Result
1	Aluminum mg/l	402.2	15	Chloride mg/l	43.8	29	Chromium hex. mg/l	
2	Arsenic mg/l	0.065	16	Cyanide mg/l		30		
3	Barium mg/l	<0.5	17	Fluoride mg/l	20.20	31		
4	Cadmium mg/l	<0.001	18	MBAS mg/l	0.06	32		
5	Chromium, Total mg/l	<0.01	19	pH	9.3	33		
6	Copper mg/l	3.05	20	Phenols mg/l		34		
7	Iron, Total mg/l	2.82	21	Solids, Suspended mg/l		35		
8	Lead mg/l	<0.01	22	Solids, Total Diss. mg/l	1392	36		
9	Manganese mg/l	<0.05	23	Sulfate mg/l	870	37		
10	Mercury mg/l		24	Ammonia nitrogen mg/l	0.83	38		
11	Nickel mg/l	1.00	25	Kjeldahl nitrogen mg/l	3.3	39		
12	Selenium mg/l	<0.005	26	Nitrite nitrogen mg/l	0.017	40		
13	Silver mg/l	0.10	27	Nitrate nitrogen mg/l	2.66	41		
14	Zinc mg/l	0.90	28	Total Phos. mg/l		42		

Examiner's Comments

BOTTLE NOT SUBMITTED FOR PHENOL.
BOTTLE NOT SUBMITTED FOR CYANIDE.

MEMORANDUM

NASSAU COUNTY DEPARTMENT OF HEALTH

240 Old Country Road

Mincola, New York 11501

To : F. V. Padar

Date: March 20, 1984

From : S. Juczak

Subject : Warning letter of 3/19/83 to Alsy, Hicksville
to correct violations discovered by DEC

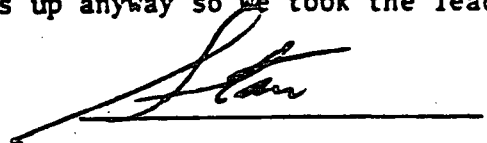
The question you had regarding the above referenced facility was "Explain why the DEC people see these violations and we don't and why we write the letter and they don't."

We did not see these violations during our past inspections.

The two DEC personnel involved, (low echelon people) were on a routine sampling mission. They come back to our office with their observations and questions and were educated by us as to what constituted violations in what they had seen at Alsy.

We asked them whether they would follow up enforcement so that it was clear who would take the lead with the facility. They discussed it by phone with Andy Yerman at DEC who reportedly told them to ask the County to follow up. It is our experience that DEC seldom follows up anyway so we took the lead.

SJ:LS:ceg

A handwritten signature in dark ink, appearing to be 'S. Juczak', written over a horizontal line.

MEMORANDUM

Appendix 1.1-5

NASSAU COUNTY DEPARTMENT OF HEALTH
240 Old Country Road Mineola, New York 11501

To : G. E. Donohue

Date: April 5, 1984

From : Stan Juczak

Received from:
Nassau Co. Dept. of Health

Subject : Questions on Alsy legal referral

1. Question: If DEC found it why don't they refer it for legal action?

Answer: Please check memo of 3/20/84 from me to FVP, copy attached, which answers question.

2. Question: Why is someone other than our lab analyzing samples and when will we get results?

Answer: DEC took the samples on their sampling mission and to their labs.

3. Question: If both Cycle II and Alsy are discharging, why not refer both?

Answer: In effect, we are referring both of them since the same people and plant are involved. They are listed under "Facility Name".

4. Question: If Alsy has responded to our requests in past to correct problems:-

- (a) What have they done this time?
(b) If good, why refer?

Answer: (a) They have unpermitted discharge points.
(b) Their recent illegal discharges were so blatant we want them fined.

5. Question: Where are sample results referred to in referral paragraph #4?

Answer: This problem is not part of this referral and therefore sample results were not attached. However, a copy is attached here for your information.

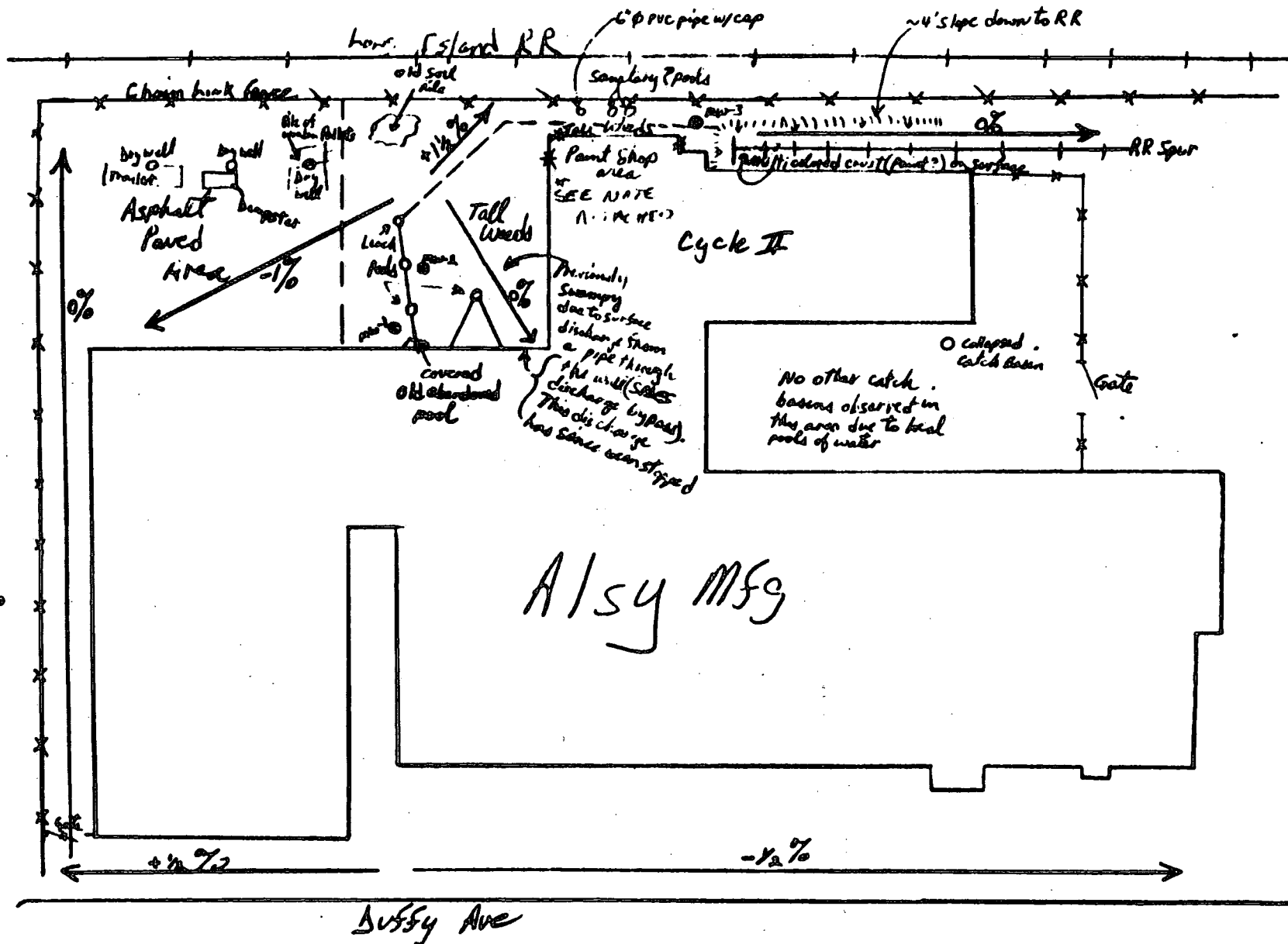
SJ:LS:ceg
Attachment



10. SITE SKETCH

Site Name: Aisy Mfg

Date: 1-23-86



No Scale

Note: Base map reduced from Soil Mechanics
Drilling Corp 5 Feb. 1985 Aug # 84-536A

Interview Acknowledgement Form
Page 2

was run from the industrial cesspools to the railroad siding area. He also suggested that the dry wells which currently receive surface runoff may have received industrial wastes, although this was never observed by the NCDOH and cannot be substantiated. The old soil pile was created in 1984 when the surface of the swampy area which had received the SPDES discharge bypass flow was skimmed and the soil piled up. Various stains on the ground surface and colors on the wall near the paint shop area seen by the NCDOH inspectors were caused by discharge from the stripping sinks of Alsy Cycle II. Alsy Cycle II is a separate corporation, but part of the operations at 280 Duffy Avenue. Two stripping sinks discharged at the corner of the building via a 6-in. pipe to the ground. In addition, waste paints stored in the area have been spilled to the ground. Soil sampling done in this area has shown concentrations of lead. A 6-in. PVC pipe coming out of the ground behind the paint shop area is said to be a clean-out pipe for the sanitary pools also in the same location. In May 1985, Alsy Manufacturing hooked up to the public sewer system, and no longer discharges to the various pools on the property.

Mr. Casaburri indicated that the former owner of the property, Balatem, Inc. operated onsite as Metalab, a maker of laboratory furniture.

Acknowledgement:

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to EA Science and Technology interviewers, or as I have revised below, is an accurate account.

Revisions (please write in corrections to above transcript):

Please see attached note -

Signature:

Howard Schaefer

Date:

4/23/86

INTERVIEW ACKNOWLEDGEMENT FORM

Site Name: Alsy Manufacturing

I.D. Number: 130027

Person Contacted: Mr. John M. Casaburri

Date: 23 January 1986

Title: Plant Manager

Affiliation: Alsy Manufacturing, Inc.

Phone No.: (516) 822-5252

Address: 280 Duffy Avenue
Hicksville, New York 11801

Persons Making Contact:
EA Representatives:

Type of Contact: In Person

Shultz/Ligotino

Interview Summary:

According to Mr. John M. Casaburri, Plant Manager, the investigation of Alsy Manufacturing, Inc. began when the New York State Department of Environmental Conservation (NYSDEC) came to collect a routine sample for the SPDES permit. NYSDEC personnel observed a discharge from a pipe from inside the building to the ground surface. In addition, other pipes were seen coming out of the wall at various spots around the building. NYSDEC notified Nassau County Department of Health (NCDOH) and NCDOH began working with Alsy Manufacturing to evaluate the situation. A monitoring program was worked out with Alsy's consultant, Soil Mechanics, Inc., and certain of the proposed ground-water monitoring wells were installed during the spring of 1985 (wells were of 4-in. PVC construction and installed to first water). However, the NYSDEC disagreed with the monitoring program, and plans for the program stopped. The wells that had been installed were not sampled. The NYSDEC sampled the pools, sediment, and a suspicious dirt pile in the back of the property, and ordered a clean up of the site. Clean up took place, but with no supervision. No post-clean up samples have been taken. E2M, Inc., a consultant for Alsy, sampled at the site just prior to the NYSDEC sampling.

Discharge to the cesspools took place from 1977 to 1985. At times when the cesspools overflowed, wastes were bypassed the SPDES discharge and dumped directly to the ground in the swampy area. It was established during investigations of the site that a cesspool was beneath the swampy pool. An abandoned cesspool is located partially under the building in line with the industrial cesspools. Mr. Casaburri has indicated that wastes were treated with cyanide destruction, metal precipitation, and chlorination before being discharged to the cesspools. Mr. Schaefer, NCDOH, indicated chlorinated solvents have, at times, been identified in the SPDES discharge, but it has never been determined where they were coming from. Mr. Schaefer hypothesized that the chlorinated solvents may have been coming from lacquers used on lamps or perhaps from degreasing machines, however there is no direct connection to the plating line and parts should be dry by the time they reach plating. Mr. Casaburri indicated there is a 275-gallon trichloroethane tank inside the building. He insisted that there is no way solvents could reach the treatment system and solvents are not part of the Alsy discharge. Chlorinated solvents are not treated for by the waste treatment system. Mr. Schaefer indicated that at some point after the problems were discovered at the site an overflow pipe

FRANCIS T. PURCELL
COUNTY EXECUTIVE



NASSAU COUNTY
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD
MINEOLA, NEW YORK 11501

Appendix 1.1-4
RECEIVED MAY 9 1986

JOHN J. DOWLING M.D. M.P.H.
COMMISSIONER

FRANCIS V. PADAR P.E. M.C.E.
DEPUTY COMMISSIONER
DIVISION OF ENVIRONMENTAL HEALTH

May 6, 1986

Rebecca Ligotino
E A Science and Technology
R.D. 2, Box 91
Goshen Turnpike
Middletown, New York 10940

Re: Alsy Mfg. Co.

Dear Ms. Ligotino:

After reviewing your interview summary and site sketch I have the following comments:

1. In the first paragraph you indicate that cleanup took place. As far as we are aware the only cleanup was of the three industrial leaching pools. No cleanup or investigation has been conducted of any of the surface areas which received unpermitted discharges or bypasses.
2. In the second paragraph reference is made to the practice of pumping industrial wastes to stormwater drywells. While this was never observed by the Health Department, I believe it was observed by Carl Vernick of Soil Mechanics. This may be a way to confirm this practice.
3. Also in the second paragraph, reference is made to the various colors found in the soil near the paint shop. While these colors may have been caused by paint stripping, it is also possible that metals used in the plating operation may be responsible. We have heard that the plating tanks were drained at times and may have allowed concentrated material to enter the discharge stream.
4. On the drawing, I indicated three areas by asterisks. These were the location of sinks which discharged through pipes onto the ground outside the building. DEC samples of the ground in these areas indicated the presence of lead.

Other than the above comments, the summary is an accurate record of the meeting. Please contact me if you have any questions.

Very truly yours,

Howard Schaefer
Bureau of Land Resources Management

HS:rc

SUMMARY AND RECOMMENDATIONSViolations and/or Problems

- ① Monthly monitoring reports not provided - scavengers not provided
- ② Trichloroethylene levels in discharge above state guidelines.

Recommended Action

- ① DATA supplied by company representative at time of inspection
- ② General manager to monitor degreasing operation to prevent spillage. - Company to monitor levels of contaminants to prove that contamination does not continue.

Comments

Levels of trichloroethylene at 420 ug/l above state limit of 50 ug/l. Company to monitor level of pollutant. If contamination continues - permit will be modified to include trichloroethylene in effluent discharge & legal action will be taken. Company was so notified.

Violations of effluent standards have decreased due to shakedown of treatment system. System in good working order.

Inspector Signature: Joseph Schechter

Name: JOSEPH SCHECHTER

Title: PUBLIC HEALTH
SANITARIAN

Date: 8/8/78

- (e) Is there any discharge of unreported contaminated storm runoff? **NO**
- (f) Is the treatment system maintained in good working order and operated efficiently? **YES**
- (g) What alternate power supply provisions exist for waste treatment facilities? **NONE**
If none, what happens to the wastewater when there is a power failure? **OPERATION CEASES -**
- (h) Have all bypasses of waste treatment facilities been eliminated? **YES**
If not, why? If not, is flow monitoring installed in bypass?
- (i) Are there any obvious air emission, noise, radiation, pesticides, or solid wastes problems at the plant? **NO**
What are they?
If yes, send copy of this report to the appropriate personnel.
- (j) Does plant require a Spill Prevention Control Countermeasure Plan? **NO**
NOTE: SPCC plan is required if the permittee stores more than;
1. 1,320 gallons of oil above ground;
2. 660 gallons of oil in a single container above ground;
3. 42,000 gallons of oil underground.
If so, is the plant approved by a licensed P.E.?

(h) In your judgement, do sampling procedures, frequency and type of sample typify plant's daily discharge (i.e. are maximum production periods, batch discharges, etc. reflected in monitoring data)? yes

(i) Does plant perform its own analysis? NO
If not, what laboratory is analysis contracted to?
If yes, what is the appearance of plant's laboratory?
NEW YORK TESTING LABORATORIES, INC.
81 URBAN AVE. WESTBURY, N.Y. 11590 516-334-7770

(j) Do all sampling and analytical methods conform to the guidelines published pursuant to Section 304(g) of 1972 FWPCA? yes

(k) Has plant requested modification to permit sampling schedules? NO

(l) Are modifications appropriated? NO

(5) MISCELLANEOUS

(a) Did the permit application truly represent conditions at the plant site? yes

(b) Are any of the following toxic pollutants or compounds containing them, being discharged that would require modification of the permit: No ✓ Yes (Check those Applicable)

Aldrin	_____	DDE	_____
Dieldren	_____	DDT	_____
Benzidine	_____	Endrin	_____
Cadmium	_____	Mercury	_____
Cyanide	_____	Polychlorinated biphenyls	_____
DDD (TDE)	_____	Toxaphene	_____

If yes, what modifications are necessary?

(c) Is sludge being generated at plant? YES
If yes, is plant reporting on its disposal? NO
If sludge disposal is at plant site, is there any visual evidence or hazards associated with entry of pollutants into surface or ground waters? NO
If not at plant, where is the disposal site, and is it acceptable to regulatory agencies? YES

#41-009 CHEMICAL WASTE DISPOSAL CORP. } SLUDGE
42-14 19th AVE ASTORIA, NY. } REMOVAL //

(d) What is the appearance of plant grounds?
GOOD

PASLEY SOLVENTS & CHEM CO.
585 COMMERCIAL AVE.
GARDEN CITY, N.Y.
(Solvent reclaimers)
1A-221

(3) COMPLIANCE

- (a) Is company complying with schedule of compliance? *N/A*
- (b) What is the current projection of the company regarding compliance with future dates in Compliance Schedule? *N/A*
- (c) Is company complying with any additional compliance requirements such as a special report submittal to the proper regulatory agency? *N/A*
- (d) Has company notified the proper regulatory agency of any non-compliance with permit conditions? *YES*
- * (e) Has company requested modification of any permit conditions other than permit sampling schedules? *NO*
- * (f) Are any modifications appropriate? *NO*

(4) SELF-MONITORING PROGRAM

- (a) Does quantity of reported self-monitoring data and signing official comply with requirements of permit? *yes*
- (b) What is the apparent quality of plant records that are required under the conditions of the permit? *good*
- (c) If net values are applicable, is the surface water intake sampled and analyzed? *N/A*
- (d) Is there any additional monitoring being performed by the plant that has not been reported? If yes, what parameters and frequency is involved and what conclusions can be drawn from data? *NO*
- (e) Do sampling locations appear to be adequate to obtain representative samples? *yes*
- (f) Has company identified effluent sampling point used for each discharge pipe by providing a sketch of flow diagram? *yes*
- (g) How frequently and accurately is continuous monitoring equipment calibrated, and how well is the equipment maintained?

92-15-1 (7/75)

Inspection & Station
Permit No.

(2.1) EFFLUENT DISCHARGE NO. 001

- (a) Wastewater Flow: 4800 gallons per day
(b) Measuring Device used for Flow: TIMED FLOW OF FLOOR SUMP
(c) Wastewater Characteristics: PROCESS WASTEWATER
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company): ON FILE - ENGINEERS REPORT

- (e) Appearance of Effluent(s): (1) visible oil _____ (5) color CLCA
(2) foam _____ (6) Temperature _____
(3) floating solids _____ (7) Odor _____
(4) Suspended Solids _____ (8) other _____
- (f) Appearance of Receiving waters: Groundwater
(1) visible oil _____ (6) color _____
(2) foam _____ (7) temperature _____
(3) floating solids _____ (8) odor _____
(4) turbidity _____ (9) other _____
(5) sludge deposits _____

(2.2) EFFLUENT DISCHARGE NO.

- (a) Wastewater Flow: 002
(b) Measuring Device used for Flow: _____
(c) Wastewater Characteristics: SANITARY
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company): SEPTIC TANK & CESSPOOLS

Picture Taken:

- (e) Appearance of Effluent(s): (1) visible oil _____ (5) color _____
(2) foam _____ (6) temperature _____
(3) floating solids _____ (7) odor _____
(4) suspended solids _____ (8) other _____
- (f) Appearance of Receiving waters: (1) visible oil _____ (6) color _____
(2) foam _____ (7) temperature _____
(3) floating solids _____ (8) odor _____
(4) turbidity _____ (9) other _____
(5) sludge deposits _____

(2.3) EFFLUENT DISCHARGE NO.

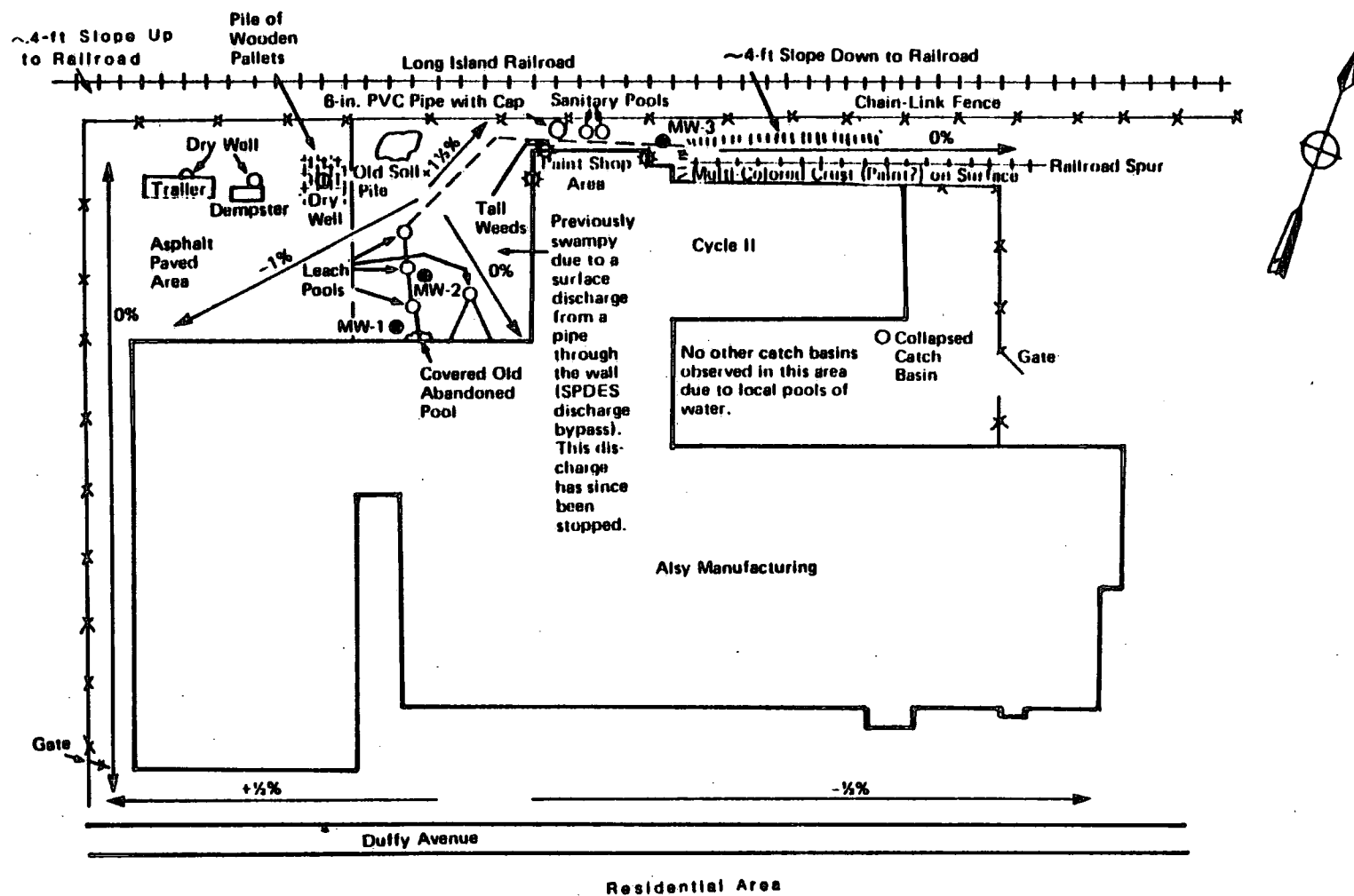
- (a) Wastewater Flow: _____
(b) Measuring Device used for Flow: _____
(c) Wastewater Characteristics: _____
(d) Type of treatment units and treatment sequence sketch (attach copy if on file and verify with company): _____

- (e) Appearance of Effluent(s): (1) visible oil _____ (5) color _____
(2) foam _____ (6) temperature _____
(3) floating solids _____ (7) odor _____
(4) suspended solids _____ (8) other _____
- (f) Appearance of Receiving waters: (1) visible oil _____ (6) color _____
(2) foam _____ (7) temperature _____
(3) floating solids _____ (8) odor _____
(4) turbidity _____ (9) other _____
(5) sludge deposits _____

August 16, 1978

**EFFLUENT LIMITATION VIOLATIONS
(BASED UPON SELF-MONITORING DATA)
DISCHARGE NO. 001**

Parameter	Permit Limitation (mg/l)	Reported Discharge (mg/l)	Date/Period of Violation
Nitrogen (Total)	10.0	50.2	8/1/77-8/31/77
Zinc	0.6	2.66	"
Copper	0.4	7.2	"
Nickel	2.0	4.973	"
pH	6.0 - 8.5	9.56	9/1/77-9/30/77
Zinc	0.6	4.82	"
Cyanide	0.4	0.54	"
Copper	0.4	7.02	"
Zinc	0.6	0.968	10/1/77-10/31/77
Copper	0.4	3.612	"
pH	6.0 - 8.5	10.18	"
pH	6.0 - 8.5	11.44	11/1/77-11/30/77
Zinc	0.6	1.532	"
Copper	0.4	2.242	"
Zinc	0.6	1.587, 5.092	12/1/77-12/31/77
Copper	0.4	3.523	"
Copper	0.4	1.158	3/13/78
Zinc	0.6	0.827	"
Cyanide	0.4	0.77	"
pH	6.0 - 8.5	4.02	6/13/78
Nitrogen (Total)	10.0	10.70	"
Copper	0.4	1.111	7/18/78
Nitrogen (Total)	10.0	11.90	"



No Scale

NOTE: Base map reduced from Soil Mechanics
Drilling Corp., 5 February 1985.
Drawing No. 84-536A.

⊗ Denotes locations of sinks that
discharged through pipes onto
the ground outside the building.

Figure 1-2. Site sketch. Alsy Manufacturing, 23 January 1986.

Site Coordinates:

Latitude: 40° 45' 47"

Longitude 73° 31' 52"

ALSY MANUFACTURING



Figure 1-1.

HICKSVILLE & FREEPORT QUADS.

Scale 1:24,000

Explorers (Signature)					Station Location					No. of Containers					Remarks				
No.	Date	Time	Comp.	Grab															
	5/8/85	1:30 PM	X		R-185-012-01	1	X												
	"	"	1	X	R-185-012-01B	2		X											
	"	"		X	R-185-012-02	3	X	X											
	"	"		X	R-185-012-03	2	X		X										
	"	"	X		R-185-012-04	1	X												
	"	"	X		R-185-012-05	2	X		X										
	"	"	X		R-185-012-06	2	X		X										
	"	"		X	R-185-012-07	2	X		X										
	"	"	X		E-185-222-01	3		X		X									
	"	"		X	E-185-222-02	3		X		X									
	"	"	X		E-185-222-03	3		X		X									
	"	"	X		E-185-222-04	3		X		X									
	"	"		X	E-185-222-05	3		X		X									
	"	"		X	E-185-222-06	3		X		X									

Relinquished by: (Signature) <i>Jim Harris</i>	Date Time 05/08/85 7:00 PM	Received by: (Signature) <i>M. L. Harris</i>	Relinquished by: (Signature)	Date Time	Received by: (Signature)
Relinquished by: (Signature) <i>L. Harris</i>	Date Time 5/9/85 4:00	Received by: (Signature) <i>Christy Rutell</i>	Relinquished by: (Signature)	Date Time	Received by: (Signature)
Relinquished by: (Signature)	Date Time	Received for Laboratory by: (Signature)	Remarks		

Appendix 1.4-1

New York State Dept. of
Environmental Conservation Form :
50 Wolf Rd.
Albany NY. 12233

Received from:
Nassau Co. Dept. of Health

Sample No.

E-185-222-01

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 16110

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low Medium X
Matrix: Water X Soil Sludge Other

ug/L or mg/kg dry weight (Circle One)

1. <u>Aluminum</u>	<u>84,000</u>	13. <u>Magnesium</u>	<u>79,400</u>
2. <u>Antimony</u>	<u>60 u</u>	14. <u>Manganese</u>	<u>5100</u>
3. <u>Arsenic</u>	<u>43</u>	15. <u>Mercury</u>	<u>1.1</u>
4. <u>Barium</u>	<u>723</u>	16. <u>Nickel</u>	<u>29,300</u>
5. <u>Beryllium</u>	<u>5 u</u>	17. <u>Potassium</u>	<u>23,400</u>
6. <u>Cadmium</u>	<u>28</u>	18. <u>Selenium</u>	<u>5 u</u>
7. <u>Calcium</u>	<u>391,000</u>	19. <u>Silver</u>	<u>10 u</u>
8. <u>Chromium</u>	<u>434</u>	20. <u>Sodium</u>	<u>13,200</u>
9. <u>Cobalt</u>	<u>53</u>	21. <u>Thallium</u>	<u>10 u</u>
10. <u>Copper</u>	<u>19,800</u>	22. <u>Tin</u>	<u>496</u>
11. <u>Iron</u>	<u>126,000</u>	23. <u>Vanadium</u>	<u>177</u>
12. <u>Lead</u>	<u>2560</u>	24. <u>Zinc</u>	<u>11,100</u>
<u>Cyanide</u>	<u>NA</u>	<u>Percent Solids (%)</u>	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager Louise Medeiros

CLIENT New York State DEC
CLIENT ID E-185-222-01
ERCO ID 16110
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/14/85
RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane	ND	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene	ND	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by:
Checked by:

CLIENT New York State DEC
CLIENT ID E-185-222-01
ERCO ID 16110
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/13/85
RESULTS IN ug/l (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	ND
Ethyl Benzene	ND
P-Xylene	ND
M-Xylene	ND
O-Xylene	ND
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 5.

Reported by:
Checked by:

New York Dept. of
Environmental Conservation Form 1
50 Wolf Rd.
Albany NY. 12233

Received from:
Nassau Co. Dept. of Health

Sample No.

E-CI-COMPOSITE

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 14117

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low _____ Medium X
Matrix: Water X Soil _____ Sludge _____ Other _____

ug/l or mg/kg dry weight (Circle One)

1. <u>ALUMINUM</u>	<u>68,900</u>	13. <u>Magnesium</u>	<u>58,600</u>
2. <u>Antimony</u>	<u>60 u</u>	14. <u>Manganese</u>	<u>1480</u>
3. <u>Arsenic</u>	<u>31</u>	15. <u>Mercury</u>	<u>1.9</u>
4. <u>Barium</u>	<u>597</u>	16. <u>Nickel</u>	<u>20,600</u>
5. <u>Beryllium</u>	<u>5 u</u>	17. <u>Potassium</u>	<u>25,600</u>
6. <u>Cadmium</u>	<u>20</u>	18. <u>Selenium</u>	<u>5 u</u>
7. <u>Calcium</u>	<u>254,000</u>	19. <u>Silver</u>	<u>10 u</u>
8. <u>Chromium</u>	<u>340</u>	20. <u>Sodium</u>	<u>13,500</u>
9. <u>Cobalt</u>	<u>50 u</u>	21. <u>Thallium</u>	<u>10 u</u>
10. <u>Copper</u>	<u>14,200</u>	22. <u>Tin</u>	<u>356</u>
11. <u>Iron</u>	<u>108,000</u>	23. <u>Vanadium</u>	<u>153</u>
12. <u>Lead</u>	<u>1720</u>	24. <u>Zinc</u>	<u>7870</u>
Cyanide	<u>NA</u>	Percent Solids (%)	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager James J. H. H. H.

New York State Dept. of
Environmental Conservation
50 Wolf Rd.
Albany NY. 12233

Form 1

Received from:
Nassau Co. Dept. of Health

Sample No.

E-185-232-02

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 16111

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water X Soil _____ Sludge _____ Other _____

(ug/L or mg/kg dry weight (Circle One))

1. <u>Aluminum</u>	<u>1240</u>	13. <u>Magnesium</u>	<u>1500</u>
2. <u>Antimony</u>	<u>60</u> u	14. <u>Manganese</u>	<u>34</u>
3. <u>Arsenic</u>	<u>28</u>	15. <u>Mercury</u>	<u>0.2</u> u
4. <u>Barium</u>	<u>100</u> u	16. <u>Nickel</u>	<u>2400</u>
5. <u>Beryllium</u>	<u>5</u> u	17. <u>Potassium</u>	<u>31,600</u>
6. <u>Cadmium</u>	<u>5</u> u	18. <u>Selenium</u>	<u>8.0</u>
7. <u>Calcium</u>	<u>15,800</u>	19. <u>Silver</u>	<u>10</u> u
8. <u>Chromium</u>	<u>13</u>	20. <u>Sodium</u>	<u>148,000</u>
9. <u>Cobalt</u>	<u>50</u> u	21. <u>Thallium</u>	<u>10</u> u
10. <u>Copper</u>	<u>3430</u>	22. <u>Tin</u>	<u>40</u> u
11. <u>Iron</u>	<u>2330</u>	23. <u>Vanadium</u>	<u>50</u> u
12. <u>Lead</u>	<u>33</u>	24. <u>Zinc</u>	<u>549</u>
Cyanide	<u>NA</u>	Percent Solids (%)	_____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Laurie H. Haddad

CLIENT New York State DEC
 CLIENT ID E-185-222-02
 ERCO ID 16111
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/14/85
 RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane	ND	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene	ND	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by: WJN
 Checked by: AS

CLIENT	New York State DEC
CLIENT ID	E-185-222-02
ERCO ID	16111
SAMPLE RECEIVED	5/9/85
ANALYSIS COMPLETED	5/13/85
RESULTS IN	ug/l (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	ND
Ethyl Benzene	ND
P-Xylene	ND
M-Xylene	ND
O-Xylene	ND
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 5.

Reported by: [Signature]
Checked by: [Signature]

New York State Dept. of
Environmental Conservation
50 Wolf Rd.
Albany NY. 12233

Form I

Received from:
Nassau Co. Dept. of Health

Sample No.

E-165-222-03

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERLO

LAB SAMPLE ID. NO. 16112

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water X Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1. Aluminum	<u>1160</u>	13. Magnesium	<u>4080</u>
2. Antimony	<u>60</u> u	14. Manganese	<u>46</u>
3. Arsenic	<u>10</u> u	15. Mercury	<u>0.31</u>
4. Barium	<u>100</u> u	16. Nickel	<u>40</u> u
5. Beryllium	<u>5</u> u	17. Potassium	<u>23,300</u>
6. Cadmium	<u>5.8</u>	18. Selenium	<u>5</u> u
7. Calcium	<u>35,200</u>	19. Silver	<u>10</u> u
8. Chromium	<u>10</u> u	20. Sodium	<u>48,100</u>
9. Cobalt	<u>50</u> u	21. Thallium	<u>10</u> u
10. Copper	<u>204</u>	22. Tin	<u>84</u>
11. Iron	<u>1630</u>	23. Vanadium	<u>50</u> u
12. Lead	<u>200</u>	24. Zinc	<u>457</u>
Cyanide	<u>NH</u>	Percent Solids (2)	_____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Laurel Stinson

CLIENT New York State DEC
 CLIENT ID E-185-222-03
 ERCO ID 16112
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/14/85
 RESULTS IN ug/l (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane	ND	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene	ND	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by: 2172
 Checked by: 15

CLIENT New York State DEC
CLIENT ID E-185-222-03
ERCO ID 16112
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/13/85
RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene -----	2,000:
Ethyl Benzene -----	46
P-Xylene -----	41
M-Xylene -----	200
O-Xylene -----	70
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 5.

Reported by:
Checked by:

New York State Dept. of
Environmental Conservation
50 Wolf Rd.
Albany NY. 12233

Form I

Received from:
Nassau Co. Dept. of Health

Sample No.

E-165-223-04

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 16113

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water X Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1. Aluminum	2440		13. Magnesium	2680	
2. Antimony	60	u	14. Manganese	79	
3. Arsenic	10	u	15. Mercury	0.2	u
4. Barium	100	u	16. Nickel	40	u
5. Beryllium	5	u	17. Potassium	2260	
6. Cadmium	5	u	18. Selenium	5	u
7. Calcium	22,400		19. Silver	10	u
8. Chromium	10	u	20. Sodium	14,200	
9. Cobalt	50	u	21. Thallium	10	u
10. Copper	116		22. Tin	64	
11. Iron	3910		23. Vanadium	50	u
12. Lead	33		24. Zinc	100	
Cyanide	1.4		Percent Solids (Z)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager James Stoddard

CLIENT New York State DEC
 CLIENT ID E-185-222-04
 ERCO ID 16113
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/18/85
 RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO
 VOLATILE COMPOUNDS
 EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane -----	210	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene -----	180	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by:
 Checked by:

CLIENT New York State DEC
CLIENT ID E-185-222-04
ERCO ID 16113
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/13/85
RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	ND
Ethyl Benzene	ND
P-Xylene	ND
M-Xylene	ND
O-Xylene	ND
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 5.

Reported by:

Checked by:

New York State Dept. of
Environmental Conservation
50 Wolf Rd.
Albany NY. 12233

Form 1

Received from:
Nassau Co. Dept. of Health

Sample No.

E-185-222-05

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 16114

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low _____ Medium X
Matrix: Water X Soil _____ Sludge _____ Other _____

ug/l or mg/kg dry weight (Circle One)

1. Aluminum	332,000	13. Magnesium	117,000
2. Antimony	60 u	14. Manganese	6420
3. Arsenic	498	15. Mercury	0.67
4. Barium	2610	16. Nickel	169,000
5. Beryllium	6.1	17. Potassium	15,000
6. Cadmium	91	18. Selenium	5.1
7. Calcium	735,000	19. Silver	10 u
8. Chromium	292	20. Sodium	90,900
9. Cobalt	107	21. Thallium	10 u
10. Copper	464,000	22. Tin	314
11. Iron	238,000	23. Vanadium	274
12. Lead	4030	24. Zinc	285,000
Cyanide	NA	Percent Solids (%)	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager James Stedman

CLIENT New York State DEC
 CLIENT ID E-185-222-05
 ERCO ID 16114
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/19/85
 RESULTS IN ug/l (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride -----	12,000	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane -----	280	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane -----	3,300	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene -----	190	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene -----	25	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by: 22 172
 Checked by: 115

CLIENT New York State DEC
CLIENT ID E-185-222-05
ERCO ID 16114
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/19/85
RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	ND
Ethyl Benzene -----	2,000
P-Xylene -----	*
M-Xylene -----	12,000
O-Xylene -----	2,400
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit of 100.

*Trace concentrations detected below the minimum reporting limit.

Reported by:
Checked by:

New York State Dept. of
Environmental Conservation Form 1
50 Wolf Rd.
Albany NY. 12233

Received from:
Nassau Co. Dept. of Health

Sample No.

E-105-222-06

Date 6/6/85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ERCO

LAB SAMPLE ID. NO. 16115

QC REPORT NO. 5680-2

Elements Identified and Measured

Concentration: Low X Medium _____
Matrix: Water X Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1. Aluminum	<u>503</u>	13. Magnesium	<u>1550</u>
2. Antimony	<u>60 U</u>	14. Manganese	<u>24</u>
3. Arsenic	<u>10 U</u>	15. Mercury	<u>0.2 U</u>
4. Barium	<u>100 U</u>	16. Nickel	<u>40 U</u>
5. Beryllium	<u>5 U</u>	17. Potassium	<u>1930</u>
6. Cadmium	<u>5 U</u>	18. Selenium	<u>5 U</u>
7. Calcium	<u>18,100</u>	19. Silver	<u>10 U</u>
8. Chromium	<u>10 U</u>	20. Sodium	<u>13,400</u>
9. Cobalt	<u>50 U</u>	21. Thallium	<u>10 U</u>
10. Copper	<u>191</u>	22. Tin	<u>40 U</u>
11. Iron	<u>778</u>	23. Vanadium	<u>50 U</u>
12. Lead	<u>12</u>	24. Zinc	<u>34</u>
Cyanide	<u>NA</u>	Percent Solids (%)	_____

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager James Steriana

CLIENT New York State DEC
 CLIENT ID E-185-222-06
 ERCO ID 16115
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/18/85
 RESULTS IN µg/l (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane -----	320	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene -----	180	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 5.

ND = Not detected above the minimum reporting limit.

Reported by:

Checked by:

CLIENT New York State DEC
CLIENT ID E-185-222-06
ERCO ID 16115
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/14/85
RESULTS IN $\mu\text{g/l}$ (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	ND
Ethyl Benzene	ND
P-Xylene	ND
M-Xylene	ND
O-Xylene	ND
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 5.

Reported by: ALD
Checked by: MS

Sample Received: 5/9/85
Analysis Completed: 6/4/85
All Results in: ug/ml (ppm)
Reported by: Jpm
Checked by: LAS
Client: New York State DEC - Region 1

ERCO / A DIVISION OF ENSECO, INC.

INORGANIC ANALYSIS

EP TOXICITY

- Data Report -

ERCO ID	CLIENT ID	Ag	As	Ba	Cd	Cr	Hg	Pb	Se
R-185-									
16118	012-01	<0.040	0.046	<2.0	<0.040	<0.40	<0.0002	<0.40	<0.020
16120	012-02	<0.040	<0.005	<2.0	<0.040	<0.40	<0.0002	<0.40	<0.020
16121	012-03	<0.040	0.046	<2.0	<0.040	<0.40	<0.0002	<0.40	<0.020
16122	012-04	<0.040	<0.005	<2.0	<0.040	<0.40	<0.0002	<0.40	<0.020
16123	012-05	<0.040	<0.005	<2.0	<0.040	<0.40	<0.0002	<0.40	<0.020
16124	012-06	<0.040	<0.005	<2.0	<0.040	<0.40	<0.0002	0.40	<0.020
16125	012-07	<0.040	<0.005	<2.0	0.066	<0.40	<0.0002	<0.40	<0.020

If customer has any questions regarding analysis, refer to sample in question by its
ERCO ID#.

Sample Received: 5/9/85
Analysis Completed: 6/10/85
All Results in: ug/g (ppm) dry wt.
Reported by: PL/AW
Checked by: RCW

ERCO / ENERGY RESOURCES CO. INC.

- Data Report -

Client: New York State DEC

ERCO ID	CLIENT ID	Total Phenolics
	R-185-	
16121	012-03	20.4
16123	012-05	0.75
16124	012-06	1.8
16125	012-07	0.51
16121 Dup.	012-03 Dup.	26.1
16124 Dup.	012-06	1.8
16124 Sp.	012-06 Sp.	102.7% recovery
Blank	NA	<0.010
QC Ampul	WP179 conc. 4	0.144 (true value 0.15; 96% recovery)

If customer has any questions regarding analyses, refer to sample in question by its ERCO ID#.

CLIENT New York State DEC
 CLIENT ID R-185-012-01B
 ERCO ID 16119
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/22/85
 RESULTS IN ng/g (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene -----	11	1
13V 1,1-dichloroethane -----	88	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform -----	170	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane -----	1,800	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene	ND	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene -----	67	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 9.4.

ND = Not detected above the minimum reporting limit.

Reported by: mmn
 Checked by: KS

CLIENT New York State DEC
CLIENT ID R-185-012-01B
ERCO ID 16119
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/23/85
RESULTS IN ng/g (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene -----	18,000
Ethyl Benzene -----	*
P-Xylene and M-Xylene --	16,000
O-Xylene -----	3,400
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 280.

*Trace concentrations detected below the minimum
reporting limit.

Reported by: W
Checked by: A

CLIENT New York State DEC
 CLIENT ID R-185-012-02
 ERCO ID 16120
 SAMPLE RECEIVED 5/9/85
 ANALYSIS COMPLETED 5/22/85
 RESULTS IN ng/g (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 601 METHOD

Compound	Result	Minimum Reporting Limit
45V Chloromethane	ND	5
46V Bromomethane	ND	5
88V Vinyl chloride	ND	2
16V Chloroethane	ND	5
44V Methylene chloride	ND	1
29V 1,1-dichloroethylene	ND	1
13V 1,1-dichloroethane	ND	1
30V 1,2-trans-dichloroethylene	ND	1
23V Chloroform	ND	1
10V 1,2-dichloroethane	ND	1
11V 1,1,1-trichloroethane	ND	1
6V Carbon tetrachloride	ND	1
48V Bromodichloromethane	ND	1
32V 1,2-dichloropropane	ND	2
33V Trans-1,3-dichloropropylene	ND	2
87V Trichloroethylene	ND	1
51V Dibromochloromethane	ND	1
33V Cis-1,3-dichloropropylene	ND	2
14V 1,1,2-trichloroethane	ND	2
47V Bromoform	ND	5
15V 1,1,2,2-tetrachloroethane	ND	2
85V Tetrachloroethylene	ND	1
7V Chlorobenzene	ND	5
19V 2-chloroethyl vinyl ether	ND	10

Multiply minimum reporting limit by dilution factor to obtain true minimum limit.

Dilution factor = 18.

ND = Not detected above the minimum reporting limit.

Reported by: W. J. S.
 Checked by: W. J. S.

CLIENT New York State DEC
CLIENT ID R-185-012-02
ERCO ID 16120
SAMPLE RECEIVED 5/9/85
ANALYSIS COMPLETED 5/23/85
RESULTS IN ng/g (ppb)

ERCO / A Division of ENSECO

VOLATILE COMPOUNDS

EPA 602 METHOD

Benzene	ND
Toluene	3,000
Ethyl Benzene	7,900
P-Xylene and M-Xylene	32,000
O-Xylene	8,000
Styrene	ND
N-Propylbenzene	ND
O-Chlorotoluene	ND
Trimethyl Benzene	ND
P-Dichlorobenzene	ND
M-Dichlorobenzene	ND
N-Butylbenzene	ND
O-Dichlorobenzene	ND
1,2,4-Trichlorobenzene	ND

ND = Not detected above the minimum reporting limit
of 180.

Reported by: WJ
Checked by: WJ

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

HS HS

Appendix 1.1-38

Owner or
Agent :
Address:

Chry-
Duffy Ave Hicksville

INSPECTED
FILE
114
115

COMMENTS

DATE

9/3/85

met with John Cassarini (plant manager)
He stated all sludge removal had been completed
last Wednesday August 28, 1985, and that the
sludge is contained in two large water-tight
steel tanks sitting on the ground rear of building
awaiting to be removed to final dump site.
Work was done by DeVito Cesspool Service
I asked if the sides of the pool were washed
with a high pressure hose. He stated to the
best of his knowledge they had been washed.
John stated that no one from DEC was present
as an observer while the work was being
done. Inspected inside two pools, could not see
well enough to determine if properly R.R. Willis
cleaned.



New York State Department of Environmental Conservation

MEMORANDUM

TO: Rocky Piaggione
FROM: Terri Gerrish
SUBJECT: Alsy Manufacturing, Hicksville (V)
Summary Abatement Order (SAO)
DATE: 04/19/85

Received
NYOEC
DEC 6 " " " " " " " "

On Wednesday, April 17, I attended a meeting at the above-referenced site. The following people were also present:

Al Gindel	Alsy, President
John Casaburri	Alsy, Manager
Howie Shaeffer	Nassau County Health Dept. (NCHD)
Bob Willis	" " " "
Bill O'Brien	DEC, Reg. 1, Div. of Water
Dick Torrey	DEC, Albany, DSHW

NOTE: Also refer to a memo from Torrey to Iannotti.

The purpose of the meeting was twofold: 1) Alsy would provide the State with results of analysis of samples which had been collected in response to the SAO, and 2) other actions which were being taken by Alsy to comply with the SAO would be discussed. Furthermore, the NCHD had been told by Alsy that drilling of on-site groundwater wells, as agreed to by NCHD and Alsy, would begin.

Following are highlights of the meeting:

1. Analysis of the 04/12/85 samples collected and analyzed by H2M for Alsy was not complete. Partial results were verbally presented at the meeting. The samples tested for EP toxicity were not EP toxic. Volatile organic results which were available for two of the four sumps sampled indicated non-detectable concentrations.
2. Mr. Gindel was informed that a determination regarding hazardousness of the waste would be made after a hard copy of all results was received. D. Torrey explained to Mr. Gindel the

Rocky Piaggione
Terri Gerrish
Alsy Manufacturing
04/19/85

basic procedures which would have to be adhered to if the waste is hazardous, e.g. submittal of a removal plan including EPA I.D. numbers, manifesting material, health and safety procedures, etc.

3. I answered a number of questions from Mr. Gindel pertaining to field investigations of hazardous waste sites, consent orders, etc. I suggested that he may want to consult his attorney, or speak to an attorney in our office, which he declined to do.
4. D. Torrey and I told Mr. Gindel that he should respond in writing to Ms. Scherb (Reg. 1 Attorney) regarding the SAO. We very clearly stated that each item in the SAO should be specifically addressed in as much detail as possible. We suggested that his attorney or engineer may be able to assist him. Mr. Gindel said he would respond in writing.
5. Mr. Gindel called Joan Scherb's office to find out if she wanted him to go to the scheduled hearing. He and I both spoke to Laurie Reilly who said Ms. Scherb would call him back if he did not have to appear.
6. B. O'Brien was told that the illegal pipe discharges he had noticed has been blocked or disconnected.
7. The NCDH discussed their 'plan', which consisted of a blueprint, with Mr. Gindel.
8. Following the meeting, D. Torrey, B. O'Brien and I walked around the site. The NCHD people were at the drill rig when we arrived at this area of the site. The work being performed is completely unacceptable.

Rocky Piaggione
Terri Gerrish
Alsy Manufacturing
04/19/85

unacceptable. There was no proposed plan which was being followed. There was no cleaning station anywhere for the hollow stem auger or other tools. The well was installed without placing any sandpack, bentonite pellets, or cement grout. D. Torrey spoke to the drillers, Soil Mechanics -- please refer to his memo.

On Thursday, April 18, I spoke to Charlie Goddard, DSHW to make him aware of the situation, since the site is a State Superfund site. Later in the afternoon Phil Barbato, Div. Water, Reg. 1 returned my call. We discussed the events which had occurred; Phil called the NCDH and told them they must inform Alsy that there was no DEC approval of the work being performed.

I also called Ramid Iyer, H2M (516)752-9060, as we had discussed, to inquire about the status of results and to clarify questions about the work performed. I was told the following:

1. H2M was hired only to get rid of the material cited in the SAO. They were not hired as consultants to evaluate the results or prepare a report of what work was done. They would only be submitting a hard copy of analytical results. The samples were collected solely for the purpose of providing appropriate information to the waste disposal firm.
2. R. Iyer took a composite sample from the pile of soil opposite the leaching pools. The sample was composited from approximately five locations, not deeper than twelve inches but at least one inch below the surface.

Rocky Piaggione
Terri Gerrish
Alsy Manufacturing
04/19/85

3. R. Iyer was present when an employee of Alsy took samples from the pools. He confirmed what B. Willis had said -- that these samples were collected into jars supplied by H2M, at the surface of the liquid.
4.
 - o The pool closest to the soil is called West 1st and was full.
 - o The pool next in direction toward the building is called West 2nd and was half full. The non-detectable organics results pertained to this pool.
 - o The pool closest to the building is called West 3rd and was empty.
 - o The pool east of West 3rd is called East 1st and was almost empty; it contained approximately 6-12 inches of liquid. Organics were non-detectable in this pool also.
5. Mr. Iyer thought East 1st was supposed to be badly contaminated. He instructed the lab to start at a detection limit of 100 ppb on all samples, but they went down to 10 ppb. He hoped for complete results including volatiles on West 1st and West 3rd by Friday April 19, 1985.

NOTE the following facts:

1. On April 17, B. O'Brien told me flow through the sumps goes sequentially from the sump nearest the building (West 3rd) to West 2nd to West 1st. West 3rd was always full.

Rocky Piaggione
Terri Gerrish
Alsy Manufacturing
04/19/85

2. B. O'Brien previously observed a pump next to a sump, with a hose leading over ground to a flooded area. The pump was hot.
3. The liquid level in the sumps at the time of sample collection was West 3rd empty, West 2nd half full, West 1st full.

TG/jg

cc: Dick Torrey
Bill O'Brien

REFERENCE #9

WORKSHEET: COMMUNITY WATER SUPPLIES AND MONITORING WELLS WITHIN A 3-mi. RADIUS OF THE SITE

Community Water Supply	Water District	Well Field	Well	Depth (ft)	Aquifer
	Jericho		6651	615	Magoth
			7781	457	Magoth
			4245	571	Magoth
			4246	458	Magoth
			7030	531	Magoth
	Hicksville		6190	605	Magoth
			6191	555	Magoth
			7562	550	Magoth
			9488		
			8249	475	Magoth
			3953	419	Magoth
			3878	478	Magoth
			9463	close to site	
			8778	570	Magoth
			8779	585	Magoth
			6192	632	Magoth
			6193	472	Magoth
			9186	635	Magoth
			7561	551	Magoth
			9212	610	Magoth
			3552	169	Magoth
			8526	601	Magoth
			5336	528	Magoth
			3488	169	Magoth
			8535	503	Magoth
	Plainview		4097	470	Magoth
			6580	601	Magoth
	Old Westbury		152	484	Magoth
	Westbury		5007	259	Magoth
			7353	391	Magoth
			8007	564	Magoth
			5655	260	Magoth
			6819	270	Magoth
			601	not listed	

WORKSHEET: COMMUNITY WATER SUPPLIES AND MONITORING WELLS
WITHIN A 3-mi RADIUS OF THE
SITE

<u>Community</u> <u>Water Supply</u>	<u>Water</u> <u>District</u>	<u>Well Field</u>	<u>Well</u>	<u>Depth</u> <u>(ft)</u>	<u>Aquifer</u>
	Westbury		7785	404	Magdalen
			8497	544	Magdalen
			5654	340	Magdalen
	Bowling Green Estate		8956	535	Magdalen
			8957	598	Magdalen
	Levittown		5301	382	Magdalen
			4451	408	Magdalen
			2402	211	Magdalen
			8321	674	Magdalen
			2580	357	Magdalen
			4450	472	Magdalen
			7676	674	Magdalen
			3194	259	Magdalen
			3618	430	Magdalen

Source: Kilburn, C. 1982. Ground-water Pumpage
in Nassau County, Long Island, New
York 1920-77. Introduction and
User's Guide to the Data Compilation.
USGS Open File Report 81-199.

W-1232
ORIGINAL—TO COMMISSION

County.....

State of New York

Department of Conservation

Division of Water Power and Control

Well No. N-3961
(on preliminary report)

LOG

Ground Surf., EL.....ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

Owner Katalab Equipment Corp.

Address 270 Suffolk Ave., Hicksville, N.Y.

Location of well..... same

Depth below surface..... 103'ft

Depth to water: Ground water..... 52'-6"ft.; Finished well..... 103'ft.

CASINGS:

Diameter..... 6 in. in. in. in.

Length..... 93 ft. ft. ft. ft.

Sealing

Casings removed

SCREENS: Make..... Johnson Openings..... 10 slot

Diameter..... 3-5/8 in. with 6" packer in. in.

Length..... 10 ft. ft. ft. ft.

Depth to top from top of casing..... ft.

PUMPING TEST: Date..... July 14, 1952 Test or permanent pump? Permanent

Duration of Test..... days..... hours

Maximum Discharge..... 100gallons per minute

Static Level Prior to Test..... ft. in. below top of casing

Level during Max. Pumping..... ft. in. below top of casing

Maximum Drawdown..... ft.

Approx. time of return to normal level after cessation

of pumping..... hours..... minutes

PUMP INSTALLED:

Type..... Turbine Make..... Dering Model No..... 1700

Motive power..... Electric Make..... H.A.S. H.P..... 10

Capacity..... 100 g.p.m. against }ft. of discharge head

No. bowls or stages..... 12ft. of total head

DROP LINE:

SUCTION LINE:

Diameter in. in.

Length ft. ft.

Use of water..... Cooling of instruments

Work started..... July 2, 1952 Completed..... July 14, 1952

Date..... Feb. 17, 1952 Driller..... Henry Matias

License No..... 152

NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports— p. 5-7.

Top of Well	
Top Soil	1-1/2'
Loam	
2-1/2'	
Dirty coarse Sand & Gravel	3-1/2'
Coarse sand Gravel & Large Stones	45'
Coarse Sand & Gravel	86'
Med. Sand & Grits	92'
Coarse Sand & Gravel	103'

County NASSAU

ORIGINAL—TO COMMISSION

File # 9 7.3.4. #2175

State of New York

Department of Conservation

Division of Water Power and Control

Appendix 1.3-2 Well No. N-3878
Page 1 of 15

(as preliminary report)

LOG

Ground Surf., El. ft. above

COMPLETION REPORT—LONG ISLAND WELL

A ft.
V ft.

Top of Well

Owner HICKSVILLE WATER DISTRICT

Address 85 BETHPAGE RD, HICKSVILLE, LI

Location of well KUHL AVE AT NEVADA ST., HICKSVILLE, LI

Depth below surface 428' feet

Depth to water: Ground water 68 ft.; Finished well 68 ft.

CASINGS: 30" x 18" GRAVEL PACK

Diameter 18" in. in. in. in.

Length 375' ft. ft. ft. ft.

Sealing PACKER

Casings removed -

2" RISER & PACKER SCREENS: Make JOHNSON EVERDUR Openings #60 SLOT

Diameter 12" in. in. in. in.

Length 53' ft. ft. ft. ft.

Depth to top from top of casing 375' ft.

PUMPING TEST: Date 7-22-52 Test or permanent pump? T.E.S.T.

Duration of Test days 10 hours

Maximum Discharge 1613 gallons per minute

Static Level Prior to Test 67 ft. in. below top of casing

Level during Max. Pumping 97 ft. in. below top of casing

Maximum Drawdown 30 ft.

Approx. time of return to normal level after cessation
of pumping - hours - minutes

PUMP INSTALLED:

Type DWT Make JOHNSTON PUMP Model No. 14' CC

Motive power EL. MOTOR Make U.S. MOTORS H.P. 125

Capacity 1200 g.p.m. against 185' ft. of discharge head

No. bowls or stages 10 } 277' ft. of total head

DROP LINE:

Diameter 10" in. in. in. in.

Length 110' ft. ft. ft. ft.

SUCTION LINE:

Diameter 10" in. in. in. in.

Length 110' ft. ft. ft. ft.

Use of water PUBLIC WATER SUPPLY

Work started 5-13-52 Completed 10-10-52

Date 12-16-52 Driller G.W. LAUMAN & SONS

License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

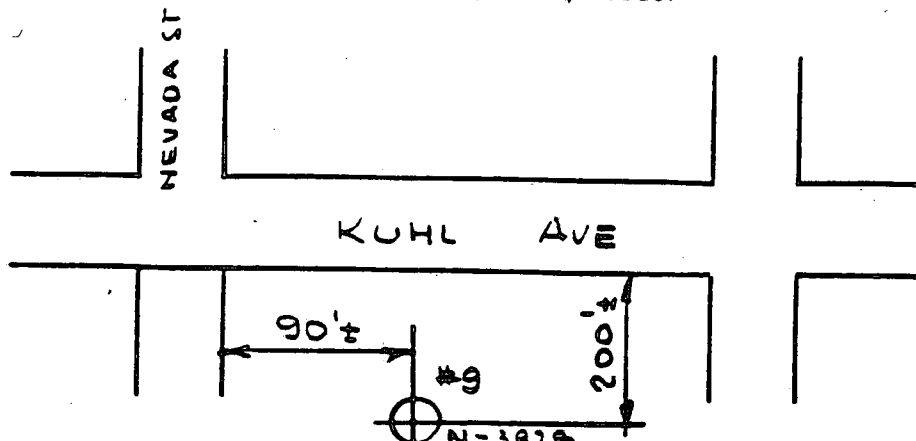
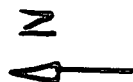
STATE OF NEW YORK
WATER POWER AND

DEC 29 1952

CONTROL COMMISSION
RECEIVED

LOG ON
REVERSE
SIDE

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

0'-1'	TOPSOIL
1'-3'	CLAY & SAND
3'-94'	SAND & GRAVEL, GRITS, BOULDERS
94'-115'	<u>GRAY SANDY CLAY</u>
115'-135'	FINE BRN SAND, STREAKS OF GRAY CLAY
135'-144'	MED FINE BRN SAND
144'-155'	FINE GRAY SAND, STREAKS OF CLAY
155'-160'	STREAKS OF CLAY & HARDPAN
160'-180'	<u>FINE GRAY SANDY CLAY</u> , LAYERS OF HDPN
180'-217'	FINE BRN SAND, SOME CLAY
217'-233'	<u>LAYERS OF SANDY CLAY & SOLID CLAY</u>
233'-245'	FINE GRAY SAND, SOME CLAY
245'-265'	FINE BRN SAND, SOME CLAY
265'-270'	<u>SOLID CLAY</u>
270'-280'	<u>SANDY CLAY & STREAKS OF SOLID CLAY</u>
280'-315'	FINE GRAY SAND & STREAKS OF CLAY
315'-339'	<u>SOLID WHITE CLAY</u>
339'-347'	FINE GRAY SAND, STREAKS OF HARDPAN
347'-379'	FINE GRAY SAND STREAKS OF CLAY
379'-428'	MED. BROWN SAND WITH STREAKS OF CLAY, GRITS, HARDPAN

County Nassau

ORIGINAL—TO COMMISSION

State of New York
Department of Conservation
Division of Water Resources

Well No. N-5655
(no preliminary ...)

LOG
Ground Surf., El. ft. above

COMPLETION REPORT—LONG ISLAND WELL

^
.....ft.
v
Top of Well

Owner WESTBURY WATER DISTRICT

Address 160 Drexel Ave. Westbury, L.I., N.Y.

Location of well T-#12 State St. New Cassel (L-5)

Depth of well below surface 258' feet

Depth to ground water from surface 57' 8"

RESOURCE MGT. SERV.

CASINGS:

Diameter in. in. in. in.

Length ft. ft. ft. ft.

Sealing

Casings removed

MAY 1-8-1972

GER. WATER RES.

WESTBURY

REC'D.

SCREENS: Make Openings

Diameter in. in. in. in.

Length ft. ft. ft. ft.

Depth to top from top of casing ft.

PUMPING TEST: Date 5/12/72 Test or permanent pump? Perm.

Duration of Test days 3 hours

Maximum Discharge 1074 gallons per minute

Static level prior to test 57 ft. in. below top of casing

Level during Max. Pumping 92 ft. 2 in. below top of casing

Maximum Drawdown 35' 2" ft.

Approx. time of return to normal level after cessation of pumping 30 minutes

PUMP INSTALLED:

Type DWT Make Layne Model No. DRHC

Motive power electric Make GE H.P. 50

Capacity 1050 g.p.m. against 23 ft. of discharge head

No. bowls or stages 3 945 ft. of total head

DROP LINE: SUCTION LINE:

Diameter 10" in. in.

Length 120' ft. 11 ft.

Method of Drilling (Rotary, cable tool, etc.)

Use of Water Public Supply

Work started 2/8/72 Completed 5/12/72

Date 5/17/72 Driller LAYNE-NEW YORK CO. INC.

License No. 5

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

INSTALLED A NEW 10 UNIC 3 stage pump bowl. Corrected well print will follow.

County.....

ORIGINAL—TO COMMISSION

Well No. 2-555
(on preliminary report)State of New York
Department of Conservation

Division of Water Power and Control

Ground Surf., El. ft. above

COMPLETION REPORT—LONG ISLAND WELL

LOG
A ft.
V ft.
Top of WellOwner WESTBURY TOWN DISTRICT NO. 12 (Layne Well #5)Address..... Westbury, Long Island, N.Y.
No. side of main line of L.I.R.R. between Brooklyn
Location of well Ave. & State St., Westbury, New YorkDepth of well below surface 250 feetDepth to ground water from surface..... 481.6" feet

CASINGS:

Diameter..... 20 in. 12 in. in. in.
Length..... 200 ft. 79 ft. ft. ft.
Sealing Cemented
Casings removed NoneSCREENS: Make..... Layne Openings..... Shutter
Diameter..... 12 in. in. in. in.
Length..... 50 ft. ft. ft. ft.
Depth to top from top of casing..... 205 ft.PUMPING TEST: Date..... August 16, 1956 Test or permanent pump?.. Permanent
Duration of Test..... days..... 3 hours
Maximum Discharge..... 1050 gallons per minute
Static level prior to test..... 43 ft. 6 in. below top of casing
Level during Max. Pumping..... 86 ft. in. below top of casing
Maximum Drawdown..... 37.16" ft.
Approx. time of return to normal level after cessation
of pumping..... hours..... 30 minutes

PUMP INSTALLED:

Type..... Turbine Make..... Layne Model No.
Motive power..... electric Make..... G.E. H.P. 50
Capacity..... 1050 g.p.m. against } 27 ft. of discharge head
No. bowls or stages..... 4 } 115 ft. of total head

DROP LINE:

Diameter 10 in. 8 in.
Length 125 ft. 11 ft.

SUCTION LINE:

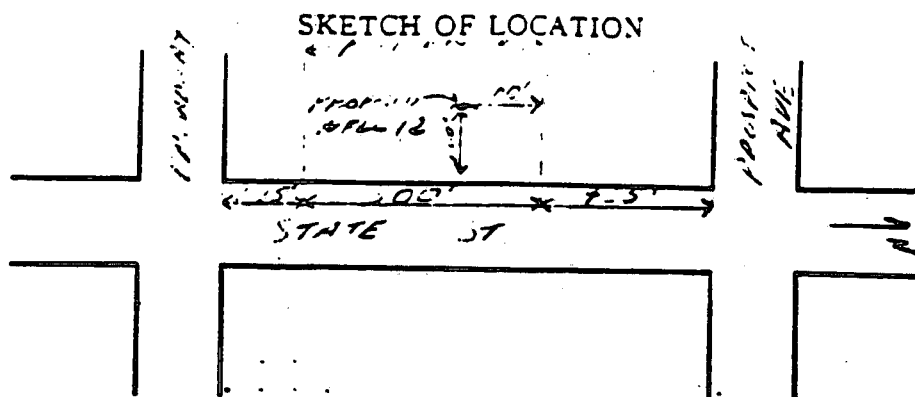
Use of water..... Public SupplyWork started..... Nov. 14, 1955 Completed..... Aug. 16, 1956Date..... August 31, 1956 Driller..... Layne-New York Co. Inc.License No..... 5NOTE: Show log of well—materials encountered, with depth below ground surface,
water bearing beds and water levels in each, casings, screens, pump,
additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

STATE OF NEW YORK
WATER POWER AND

SEP 4 - 1956 ✓

CONTROL COMMISSION
RECEIVED



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

4-9-65 - Layne HD @ 56' 2" - repaired pump
cleaned well repaired pump reset
pump - no changes made in well.

6-24-77 Layne - Routine overhaul of pump. Depth to
water @ 53 ft.

6 of 13

LAYNE NEW YORK CO., INC. NEW YORK, N. Y. WATER SUPPLY CONTRACT NO. 21572	JOB NO. 21572 DIST. NEW YORK, N. Y.
DRAWN BY W. J. E. E.	CHECKED BY W. J. E. E. DATE 12/1/52

County..... N-8956 Nassau

ORIGINAL—TO COMMISSION
WSA-6212

State of New York
Department of Conservation
Division of Water Resources

Well No.

LOG
Ground Surf., El. ft. abc

COMPLETION REPORT—LONG ISLAND WELL

^
.....ft.
v
Top of Well

Owner BOWLING GREEN ESTATES WATER DISTRICT
Town of Hempstead Water Dept.
Address 1995 Prospect Ave., East Meadow, N.Y.
Location of well T-#1 w/o Iris Place, s/o Astor Place

Depth of well below surface..... 535'feet
Depth to ground water from surface..... 38 1/2" 10/4/73feet

CASINGS:

Diameter..... 36"in. 20"in. 12"in.in.
Length..... 7'ft. 466'ft. 84'-3"ft.ft.
Sealing cement
Casings removed 36" surface

SCREENS: Make Layne Openings #7 Slot
Diameter..... 12" IDin.in.in.in.
Length..... 60'ft.ft.ft.ft.
Depth to top from top of casing..... 470'ft.

Log attached

Well print to follow.

PUMPING TEST: Date..... 10/10/75 Test or permanent pump? Perm.
Duration of Test..... days 7-1/2hours
Maximum Discharge..... 1380gallons per minute
Static level prior to test..... 44ft.in. below top of casing
Level during Max. Pumping 144ft.in. below top of casing
Maximum Drawdown 100'ft.
Approx. time of return to normal level after cessation
of pumping..... hours 30minutes

PUMP INSTALLED:

Type DWT Make Layne - ~~H. S. R.~~ Model No. TLC
Motive power electric Make U.S. H.P. 100
Capacity 1400g.p.m. against } 71.4ft. of discharge head
No. bowls or stages 6 } 215.4ft. of total head

DROP LINE: SUCTION LINE:
Diameter 10"in.in.
Length 169'-8"ft. 9'-9"ft.

Method of Drilling (Rotary, cable tool, etc.) Reverse Rotary
Use of Water Public Supply

Work started..... 8/3/73 Completed..... 10/10/75

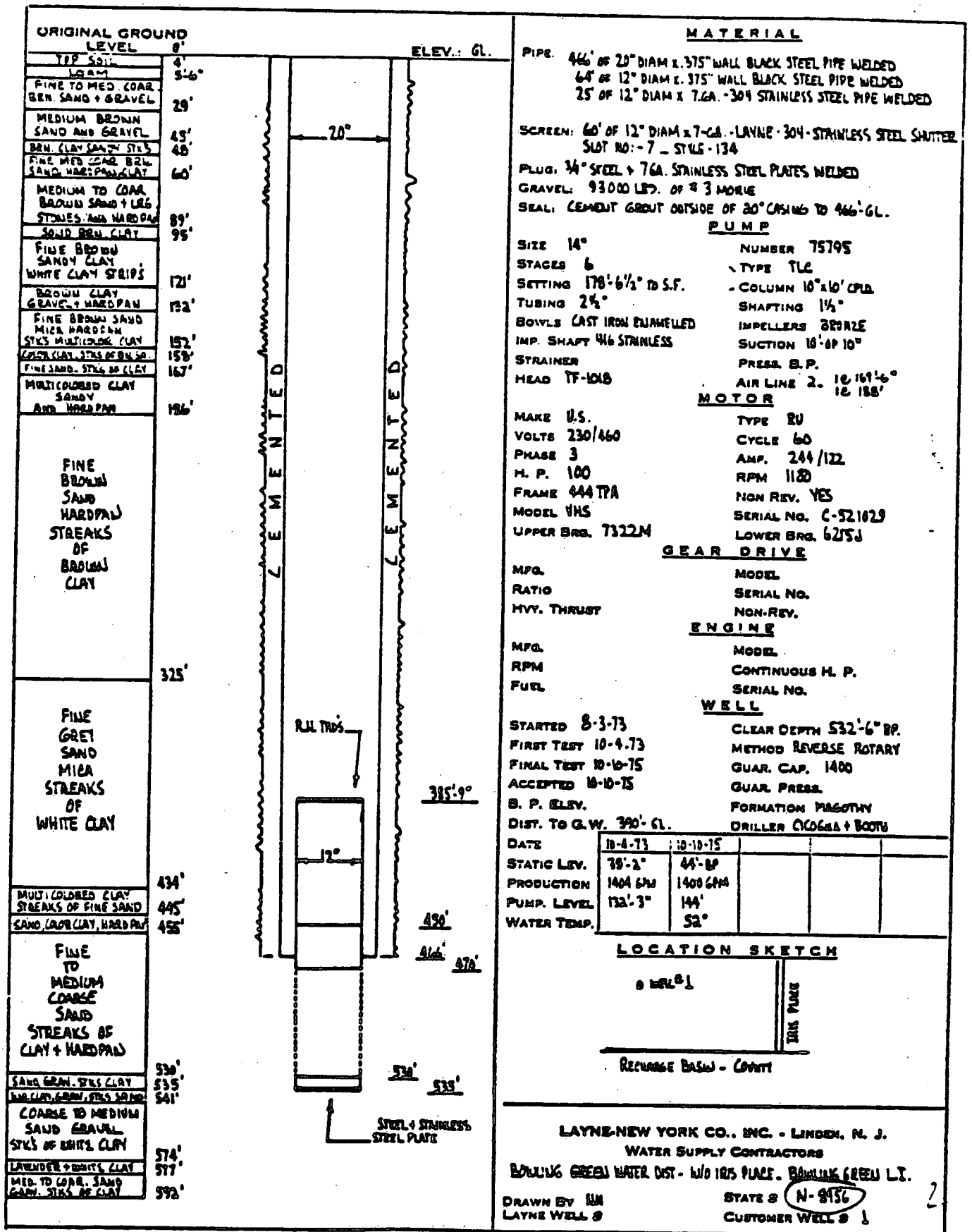
Date..... 2/18/76 Driller Layne-New York Co., Inc.

License No. 5

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

Driller



ORIGINAL—TO COMMISSION

County Nassau

State of New York
Department of Conservation
Division of Water Resources

Well No. N 8526
(no preliminary report)

LOG
Ground Surf., El. ft. above

^
.....ft.
v
Top of Well

1252-5020
1-3-69

COMPLETION REPORT—LONG ISLAND WELL

Owner Hicksville Water District

Address Hicksville, New York

Location of well # 4-2 NEWBRIDGE ROAD

Dept of well below surface 601'-2" feet

Depth to ground water from surface 54 feet

CASINGS:

Diameter 20 in. in. in. in.
Length 511 ft. ft. ft. ft.
Sealing
Casings removed

SCREENS: Make E.E. Johnson Openings 50 Slot

Diameter SEE REVERSE SIDE in. in. in.
Length ft. ft. ft. ft.
Depth to top from top of casing 397'-7" ft.

PUMPING TEST: Date 3/20/69 Test or permanent pump? T

Duration of Test 8 days 8 hours
Maximum Discharge 1421 gallons per minute
Static level prior to test 54 ft. in. below top of casing
Level during Max. Pumping 87 ft. 5 in. below top of casing
Maximum Drawdown 5 33'-5" ft.
Approx. time of return to normal level after cessation
of pumping 20 hours 20 minutes

PUMP INSTALLED:

Type DWT Make Johnston Model No. 12DC
Motive power Electric Make US H.P. 125
Capacity 1400 g.p.m. against 187 ft. of discharge head
No. bowls or stages 6 287 ft. of total head

DROP LINE:

Diameter 10 in. 10 in.
Length 110 ft. 10 ft.

SUCTION LINE:

Use of water Public Supply

Work started 1/12/69 Completed 3/28/69

Date 4/2/69 Driller The Lauman Company, Inc.

License No. 13

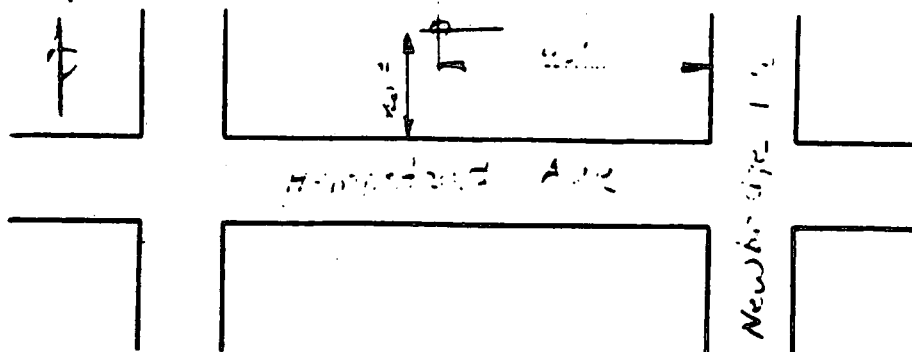
NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

APR 15 1969 ✓

11 of 12

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

397'-7" to 500'-2"	12" Riser
500'-2" to 520'	TW Blank
520'- 555'-7"	12" Screen
555'-7" to 575'-7"	T.W. Blank
575'-7" to 601'-2"	12" Screen

Well N-8526

Screened in Basal Magothy Formation

T.D. - 642 ft below lsd

Elev. - +120 ft ± above msl

Yield - 1,420 gpm; dd: 34 ft

Sp. Cap. - 42 gpm/ft of dd

Correlation (from GW-18 and U.S.G.S. records)

U.P. 0 to 93 ft below lsd

Magothy 93 to 529 ft. below lsd

Basal Magothy 529 to 642 ft below lsd

(Raritan clay should be at about 670 ft ± below lsd)

(Correlation good)

4/2/67 U.S.G.S. Harris, Tension

#526

4.2 HICKSVILLE 4. 12 4 15

EXISTING GRADE

Top 1

Med. Coe brn sd, grt, gravel

51

Fi. Med brn sd, grt, gravel

95

Red clay cl, str f. sd

116

Fi. Med red sl, some cl

135

141

Cemented formation & str sd

Med. Coe red sd, some cl

169

Multi. col. sd, cl, str sd, cl

191

Lys. fib. sd & sd, cl

254

2

204		Multi col sd, cl
253		Fi brn sd
274		
290		lyrs qry sd, & sid cl
295		qry cl
303		lyrs multi col sd, & sid cl
		qry cl
329		
		lyrs qry sd, & sid cl
346		Fi-Med brn sd
354		lyrs & qry sd, sd, & sid cl
363		Fi brn sd, str sd, cl
374		
		Fi qry sd some cl, str sd, cl
387		
394		Fi multi col sd, cl
		Fi qry sd, str sd, cl
404		
		Multi col sd, cl
416		Fi multi col sd
423		Fi-Med brn sd
429		
		Med-cse brn sd, str cl
449		
		lyrs multi col sd, & sid cl
494		Fi-Med brn sd
498		

		Fi brn sd y cl
469		
474		Med-Cse gry sd
		Med-Cse brn sd some grit
483		
		Fi gry sd y cl
492		
498		Fi gry sd
		Multi col sd y cl
514		
519		Fi multi col sd, str sd y cl
523		Fi-med brn sd
529		Fi gry sd & cl; str pyrite
		Med-cse gry sd some cl
553		
559		Med-cse brn sd
		Multi col sd y cl
574		Med-cse brn sd
578		Fi-Med gry sd some cl
582		
		Med-cse brn sd some grit
593		
598		Med-cse red sd, grit, gravel
		Med brn sd some grit
609		
613		Cse brn sd, sd cl, grit, gravel
619		Fi brn sd
624		Fi-Med brn sd some grit
628		Fi brn sd
633		Brn cl, cse sd, grit, gravel
638		Med brn sd
642		Silty brn cl

County Nassau

ORIGINAL—TO COMMISSION

State of New York

Department of Conservation

Division of Water Resources

Well No. N 8807

(see preliminary report)

LOG

Ground Surf., El. ft. above sea

^
..... ft.
v

Top of Well

COMPLETION REPORT—LONG ISLAND WELL

Owner Certified IndustriesAddress 344 Duffy Ave. Hicksville,Location of well SAMEDepth of well below surface 139'-9" feetDepth to ground water from surface 17 feet

CASINGS:

Diameter 8 in. in. in. in.Length 109'-2" ft. ft. ft. ft.

Sealing

Casings removed

SCREENS: Make Johnson S.S. Openings 50 SlotDiameter 8 in. in. in. in.Length 30'-7" ft. ft. ft. ft.Depth to top from top of casing 109'-2" ft.PUMPING TEST: Date 10-25-71 Test or permanent pump? TDuration of Test days 4 hoursMaximum Discharge 361 gallons per minuteStatic level prior to test 17 ft. in. below top of casingLevel during Max. Pumping 54 ft. in. below top of casingMaximum Drawdown 37 ft.Approx. time of return to normal level after cessation
of pumping hours minutes

PUMP INSTALLED:

Type Diaphragm Make Johnson Model No. 8CSMotive power Electric Make US H.P. 20Capacity 350 g.p.m. against 116 ft. of discharge headNo. bowls or stages 7 ft. of total head

DROP LINE:

Diameter 5 in. in. in.Length 40 ft. ft. ft.

SUCTION LINE:

Diameter 5 in. in. in.Length 10 ft. ft. ft.Method of Drilling (Rotary, cable tool, etc.) RotaryUse of Water WashingWork started 10-13-71 Completed 10-25-71Date 3-14-72 Driller LAUMAN COMPANY, INC.License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

17 of 19

HICKSVILLE WATER DISTRICT
TEST WELL #9
LOG FROM GRADE

FORMATION	THICKNESS OF STRATUM	DEPTH OF STRATUM
Top soil	2' - 1'-6"	1'-6" 2
Loam	4' - 3'-6"	5' 6
Coarse brown sand grit & gravel	80'	85' 86
Med coarse brown sand grit & lumps of clay	52'	137' 138
Med fine brown sand	14'	151' 155
Fine gray sand & some clay	11'	165' 166
Fine gray sandy clay & layers of hard pan	15'	180' 181
Fine brown sand & some clay	37'	217' 218
Layers of fine gray sandy clay & solid clay	16'	233' 234
Fine gray sand & some clay	34'	267' 268
Fine gray sandy clay	40'	307' 308
Fine brown sand & some clay	24'	331' 332
Fine gray sandy clay	5'	336' 337
Solid brown clay	11'	347' 348
Fine brown sand	4'	351' 352
Fine gray sandy clay	28'	379' 380
Fine brown sand & some clay	48'	427' 428
Fine brown sandy clay & layers of hard pan	21'	448' 449
Fine red sand & some clay	8'	456' 457
Fine gray sandy clay	20'	476' 477
Fine brown sand & some clay	8'	484' 485
Layers of gray sandy clay & solid clay	41'	525' 526
Layers of solid gray clay, sandy clay grit & gravel	29'	554' 555
Layers of solid gray clay & sandy clay	24'	578' 579
Med coarse brown sand & grit	6'	584' 585
Solid brown clay	22'	606' 607

STATE OF OHIO
WATER COMMISSION

MAR 15 1952

CONTROL COMMISSION
RECEIVED

W.C.A. 2175-184.

Well No. 4-222-7
(on preliminary report)

LOG

Ground Surf., El.....ft. above sea

A
.....ft.
V
Top of Well

LOG ON
ATTACHED
SHEET

Use of water...FORMATION TEST HOLE

Date 3-14-52 Driller C. W. LAUMAN & Co. Inc.

STATE OF NEW YORK
WATER POWER AND

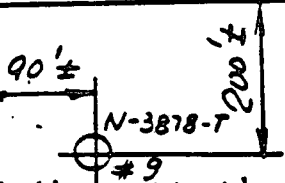
MAR 15 1952 ✓

CONTROL COMMAND
RECEIVED

19 of 19
--

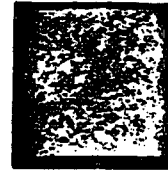
SKETCH OF LOCATION

KUHL AVE



Well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point



Also Mgt.

*Plainview Area
Well Info.*

BETHPAGE, NEW YORK DISTRICT 1000

BEL-0000

TOR

500

25 Adams Avenue
Bethpage, NY 11714

Official: Sal Greco, Jr. Chairman
Bd. of Commissioners

Consult: H2M

Superintendent: Ron Krumholz

Lab: H2M

Population: 33,650 (1981)

Treatment: Chlorination (E), Polyphosphate, Lime, Caustic Soda (#BDG-1)

WELLS (9)

Address	Village	Local Num	N-Num	Depth (FL)	Strata	Capacity (GPM)
E/S Broadway	Bethpage	5-1	8004	740	M	1400
N/S Park La	Bethpage	6-1	3876	386	M	1400
	Bethpage	6-2	8941	770	M	1400
E/S Adams Avenue	Bethpage	7A	8767	640	M	1400
	Bethpage	8A	8768	678	M	1400
	Bethpage	9	6078	275	M	1400
Sophia St	Bethpage	10	6915	608	M	1400
	Bethpage	11	6916	611	M	1400
Broadway	Bethpage	BDG-1	9591	682	M	1380

STORAGE TANKS (2)

Address	Village	Capacity (MG)	Type
Adams Avenue	Bethpage	1.25	Elevated
Sophia Street	Bethpage	1.50	Ground

4 Dean Street
Hicksville, NY 11802

Official: Nicholas Brigandi, Chairman Consult: H2M
Bd. of Commissioners

Superintendent: Richard Woodwell Lab: H2M

Population: 57,000 (1981)

Treatment: Chlorination (E), Polyphosphate, Lime, Caustic Soda,
OR (Packed Tower Aeration) (#1-5)

WELLS (19)

Address	Village	Local Num	N-Num	Depth (Ft)	Strata	Capacity (GPM)
E/S Bethpage Rd	Hicksville	1-4	7562	545	M	1400
	Hicksville	1-5	8249	490	M	1400
	Hicksville	1-6	9488	575	M	1380
W/S Newbridge Rd	Hicksville	2-2	5336	523	M	1200
Jerusalem Ave	Hicksville	3-2	8525	503	M	1400
W/S Newbridge Rd	Hicksville	4-2	8526	601	M	1400
N/S Stewart Ave	Hicksville	5-2	7561	550	M	1400
	Hicksville	5-3	9212	604	M	1400
W/S Kuhl Ave	Hicksville	6-1	3753	419	M	1200
	Hicksville	6-2	3878	428	M	1200
E/S Miller Pl	Hicksville	7-1	6190	600	M	1200
	Hicksville	7-2	6191	550	M	1200
Dean St	Hicksville	8-1	6192	626	M	1400
	Hicksville	8-2	6193	467	M	1400
	Hicksville	8-3	9180	630	M	1400
Alicia St	Hicksville	9-1	8778	590	M	1400
	Hicksville	9-2	8779	585	M	1400
	Hicksville	9-3	10208		M	
Barclay St	Hicksville	10-1	9463	638	M	1380

STORAGE TANKS (5)

Address	Village	Capacity (MG)	Type
Dellpage Rd	Hicksville	1.25	Elevated
Dean St	Hicksville	1.5	Ground
Stewart Ave	Hicksville	2.0	Ground
Newbridge Rd and Barter La	Hicksville	0.5	Elevated
Newbridge Rd	Hicksville	2.0	Ground

JERICHO WATER DISTRICT (1981)

WA1-8200

TCB

125 Convent Road
 Syosset, NY 11791

Official: Edward F. Bracken, Jr.
 Chairman, Bd. of Commissioners

Consult: Sidney Bowne and Son

Superintendent: Len Martling

Lab: Rylest

Population: 64,500 (1981)

Treatment: Chlorination (E), Caustic Soda

WELLS (20)

Address	Village	Local Num	N-Num	Depth (Ft)	Strata	Capacity (GPM)
N/S Convent La	Syosset	3	198	617	M	1150
	Syosset	4	199	600	M	1120
	Syosset	5	570	600	M	1200
N/S Wheatley Rd	Brookville	6	3474	512	M	1200
	Brookville	7	3475	482	M	1200
	Brookville	16	7446	493	M	1200
W/S Motts Cove Rd	Roslyn Harbor	11	5201	504	L	1200
W/S Cypress Dr	Woodbury	12	6092	631	M	1200
	Woodbury	13	6093	606	M	1200
N/S Tobie La	Jericho	14	6651	610	M	1200
S/E Jericho Tpk	Jericho	9	4245	565	M	1200
Cantiaque Rock	Jericho	15	7030	530	M	1200
Cold Spring Rd	Laurel Hollow	17	7593	468	M	1200
W/S Split Rock Rd	Syosset	18	7772	563	M	1200
	Syosset	19	7773	560	M	1200
		20	10149		M	

JERICHO WATER DISTRICT (Continued)

WELLS (Continued)

Address	Village	Local Num.	N-Num	Depth (Ft)	Strata	Capacity (GPM)
East Norwich Rd	Jericho	22	7781	454	M	1200
Waldemar Rd	Woodbury	23	8043	688	N	1200
Kirby La	Muttontown	25	8355	590	M	1400
N.E. Simoneon Rd	O. Brookville	27	8713	372	M	1400

STORAGE TANKS (6)

Address	Village	Capacity (MG)	Type
Kirby La	Muttontown	3.0	Ground
Wheatley Rd	Brookville	1.0	Elevated
Convent La	Syosset	1.5	Elevated
Jericho Tpke	Jericho	1.5	Elevated
Orchard Dr	Woodbury	2.0	Stand Pipe
Split Rock Rd	Syosset	3.4	Stand Pipe

PLAINVIEW WATER DISTRICT

(72) WL1-6469

TOP

10 Manetto Hill Road
Plainview, NY 11803

Official: John Edwards, Chairman
Ed. of Commissioners

Consult: H2M

Superintendent: Samuel Panciroli

Lab: H2M

Population: 40,000 (1981)

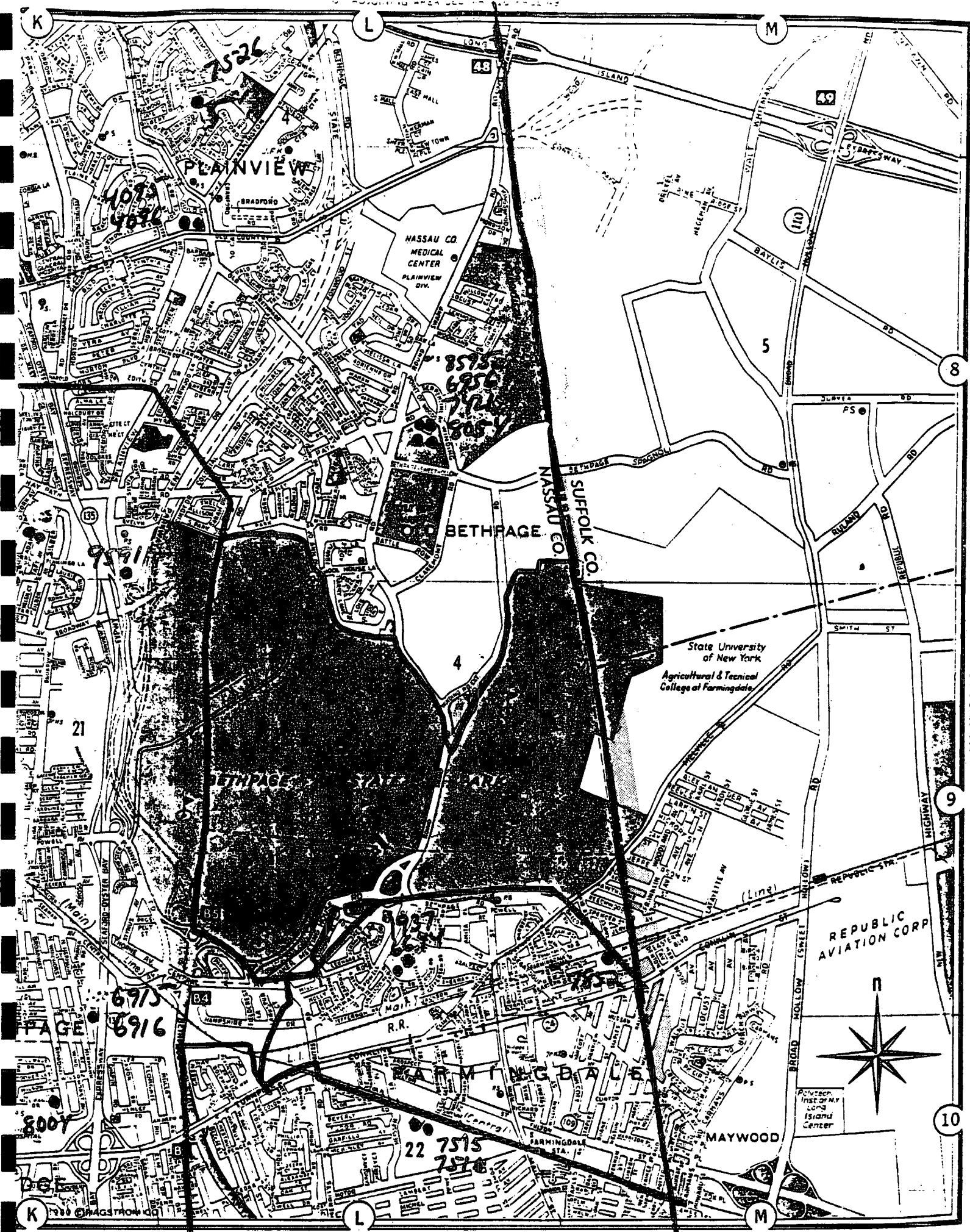
Treatment: Chlorination, Polyphosphate, Lime

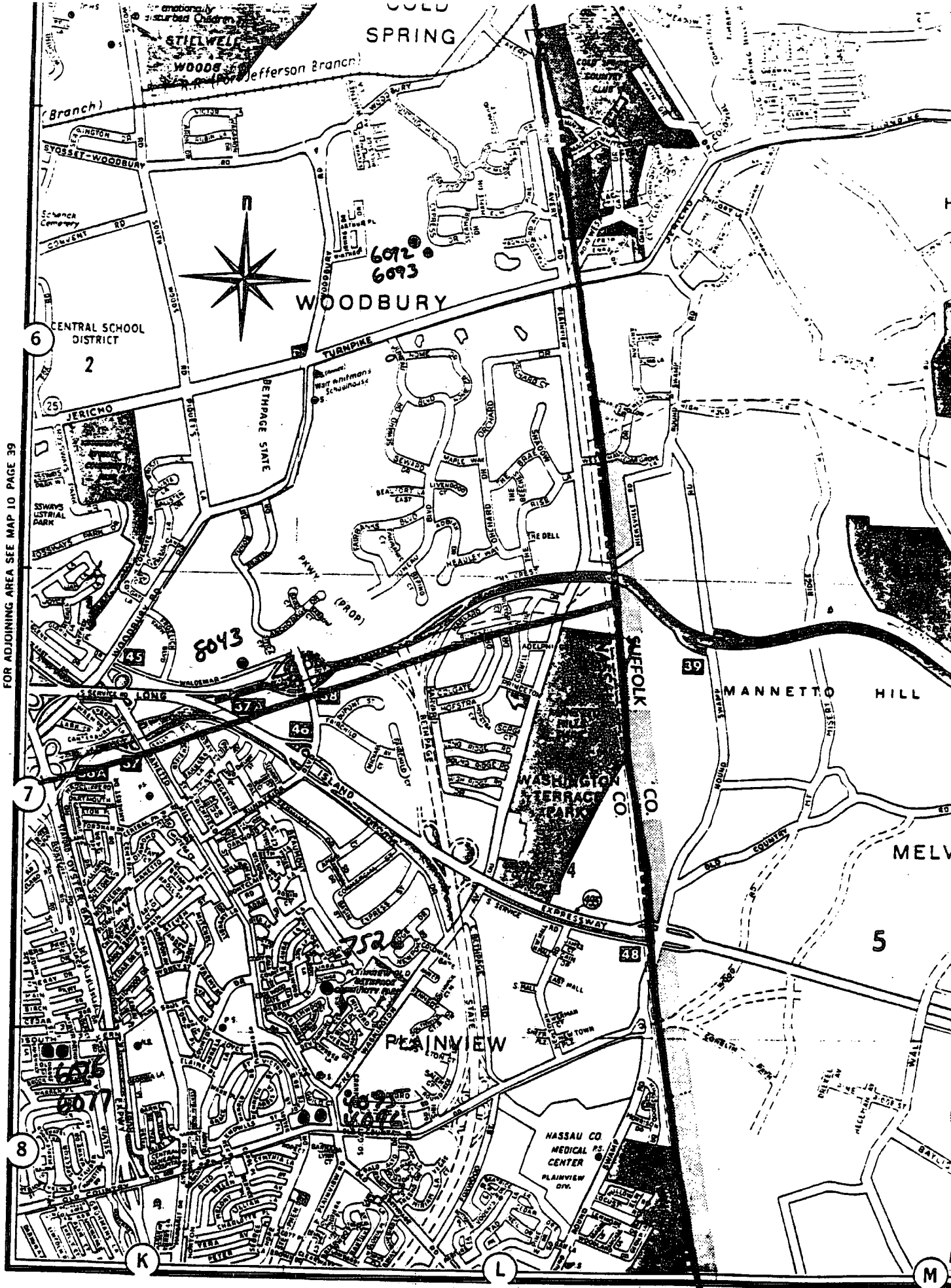
WELLS (11)

Address	Village	Local Num	N-num	Depth (Ft)	Strata	Capacity (GPM)
W/S Manetto Hill Rd	Plainview	1-1	4095	490	M	1200
	Plainview	1-2	4096	494	M	1200
S/S Donna Dr	Plainview	2-1	7526	688	M	1400
E/S Orchard St	Plainview	3-1	4097	463	M	1200
	Plainview	3-2	6580	596	M	1200
Southern Pkwy	Plainview	4-1	6076	358	M	1200
	Plainview	4-2	6077	460	M	1200
S/S Winding Rd	Plainview	5-1	6956	557	M	1400
	Plainview	5-2	7421	559	M	1400
	Plainview	5-3	8054	580	M	1400
	Plainview	5-4	8595	610	M	1350

STORAGE TANKS (3)

Address	Village	Capacity (MG)	Type
S/S Donna Dr	Plainview	1.25	Elevated
Southern Pkwy	Plainview	1.5	Ground
Winding Rd	Plainview	2.0	Ground



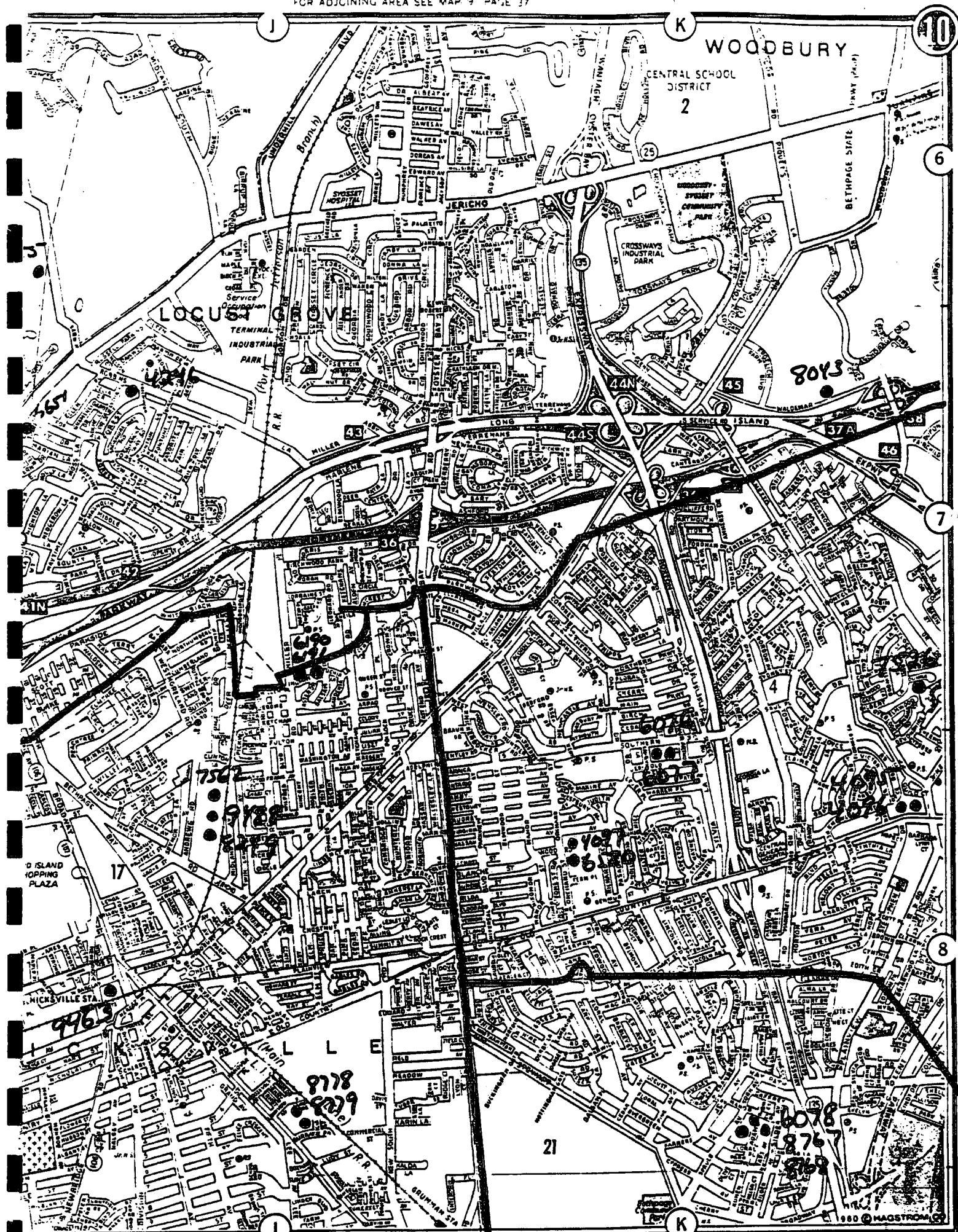


FOR ADJOINING AREA SEE MAP 10 PAGE 39

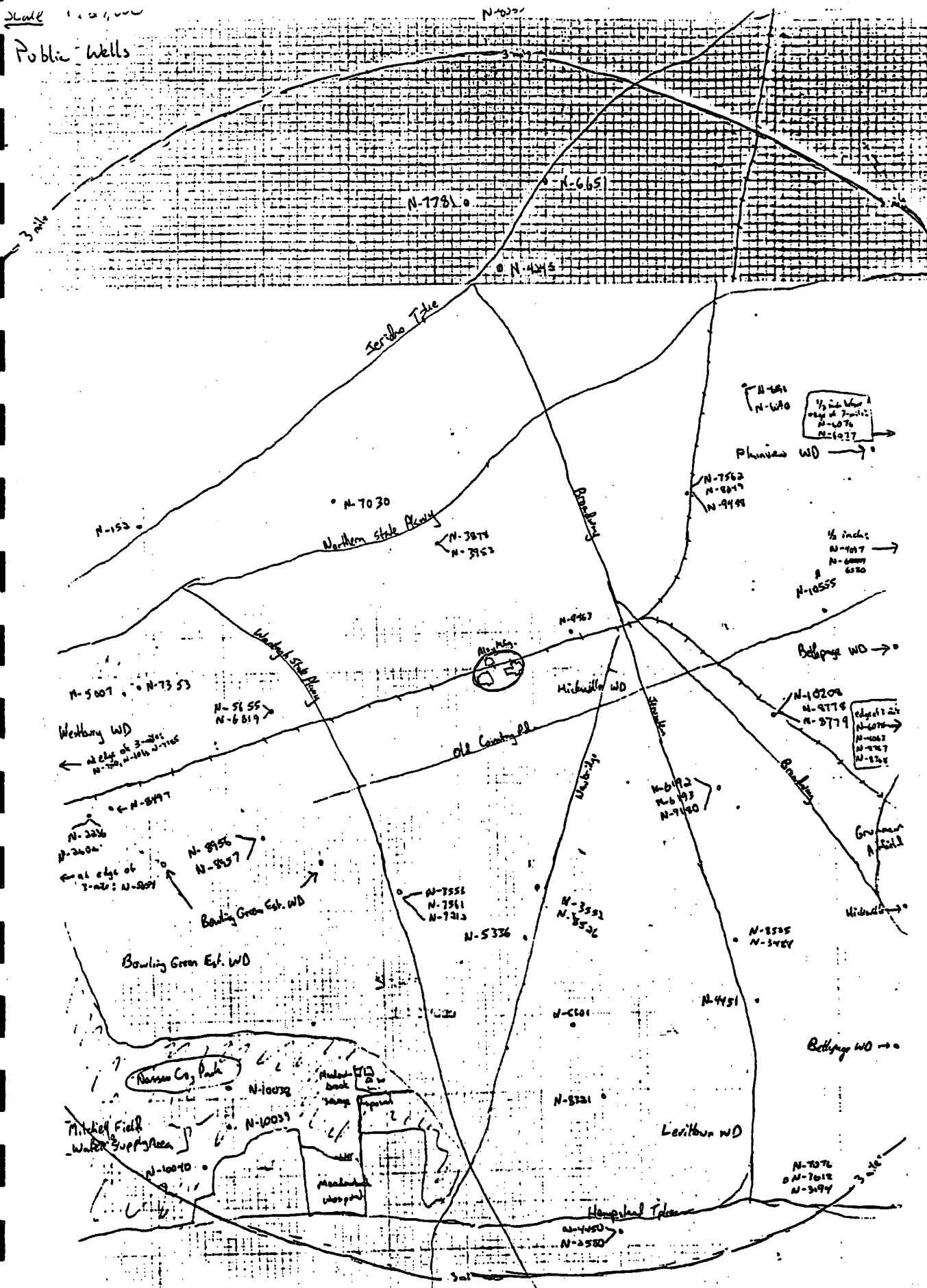
FOR ADJOINING AREA SEE MAP 17 PAGE 50

Now

Hagstrom First Edition Wall Map



Public - Wells



ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or

Agent : ALSY MFG. Co.

Address:

Inspector

File 590
Gen'l Co

DATE

COMMENTS

DRINKING WATER WELLS WITHIN APPROXIMATE 1 MILE
RADIUS OF ALSY

WATER DIST.

DIRECTION

WELL NUMBER(S)

HICKSVILLE

NORTH

N 3953

N 3878

EAST

N 9463

SOUTH

N 7561

N 9212

SOUTHEAST

N 5336

BOWLING GREEN

SOUTHWEST

N 8956

N 8957

WESTBURY

WEST

N 5655

N 6819

HS

REFERENCE #10

TO:

DATE:

FROM:

COPIES:

SUBJECT:

Alsy Manufacturing

REFERENCE:

Hicksville Quad - 3-mile radius map

The 3-mile radius
map is in the pocket
in the back of this report

REFERENCE #11

CHEMICAL/SOLVENT WASTE REPORT

For each shipment of wastes, complete the following table with the indicated information. ATTACH COPIES OF MANIFESTS OR RECEIPTS FROM SCAVENGER FOR EACH SHIPMENT MADE.

Date of Shipment	Type of Waste (Chemical, oil or solvents)	Amount Shipped	Shipped By			Shipped To (Final Disposal Site For Waste)
			Scavenger Name	Scavenger Address	Scavenger Number	
1/9/86	PAINT SOLVENT	385 gal.	TECHTRONIC ECOLOGICAL CO.	8 WALWORTH ST., BROOKLYN, NY 11205	NYD 0008 24334	BURNED
3/17/86	" "	385 gal.	" "	" "	" "	" "
6/12/86	" "	825 gal.	" "	" "	" "	" "
9/14/86	" "	770 gal.	" "	" "	" "	" "
9/16/86	PAINT STRIPPER	110 gal.	" "	" "	" "	RECLAIMED
9/30/86	WASTE WATER SLUDGE	2 YARDS	CHEMICAL MANAGEMENT INC.	340 EASTERN PKWY FARMINGDALE, NY 11735	NYD 0006 91949	LAND FILL
9/30/86	PLATING TANK CINIDE SLUDGE	1 YARD	" "	" "	" "	NEUTRALIZED + THEN LAND FILL
12/09/86	PAINT SOLVENT	600 gal.	TECHTRONIC ECOLOGICAL CORP.	8 WALWORTH ST. BROOKLYN, NY. 11205	NYD 0008 24334	BURNED

List any accidental spills that occurred during the reporting period:

Date of Spill	Amount of Spill	Describe the nature of spill

Signature of Company Representative	<i>Bob B. H.</i>	Title	<i>Plant Manager</i>	Date:	<i>9/30/1987</i>
-------------------------------------	------------------	-------	----------------------	-------	------------------

CHEMICAL/SOLVENT WASTE REPORT

Name

ALSY MANUFACTURING INC

Permit Number

NYD 05278
3438

Bureau of Land Resources Management

Address

Nassau County Department of Health

270 DUFFY AVE HICKSVILLE, NY 11801

Report Period

1/1/96 - 12/31/96

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
AGATENE LACQUOR #2	CLEAR COATING	AGATE LACQUOR CO. OUR CODE # 4067	1530 gal.
LACQUOR REDUCER	LACQUOR THINNER	AGATE # 6225	410 gal.
LACQUOR THINNER	LACQUOR THINNER	AGATE # 4066	1155 gal.
ETCHING THINNER	PAINT THINNER	FYN PAINT CO # 4403	550 gal.
SPRAY PAINTS	SPRAY COATING FOR METAL PARTS ASSORTED	FYN PAINT CO COLORS	1460 gal
LACQUOR THINNER	LACQUOR THINNER	PRIDE SOLVENTS CO. # 1370	990 gal
ACETONE	WASH THINNER	PRIDE # 1065	605 gal.
XVLOC	PAINT THINNER	PRIDE # 1024	770 gal
AIROMATIC #150	SLOW PAINT THINNER	PRIDE # 5570	165 gal
111 TRI CHLOROETHANE	DEGREASING SOLVENT	PRIDE # 3077	6500 gal
BRASS ANODES	BRASS PLATING	ENEQUIST CHEM CO. # 4704	750 gal
NICKEL ROUNDS	NICKEL PLATING	ENEQUIST CHEM CO # 4792	551 gal
NICKEL BRIGHTENER	NICKEL PLATING	ENEQUIST CHEM CO # 4052 # 6745	125 gal
WETTING AGENT	PLATING	ENEQUIST CHEM CO # 5016 # 5205	40 gal

ALSY MANUFACTURING "INC

WYD 05278
34 3A

Address

270 DUFFY AVE HICKSVILLE, N.Y. 11801

Report Period

11/1/80 12/31/80

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

[illegible]

Bureau of Land Resources Management

Nassau County Department of Health

Name

ALSY MANUFACTURING INC

Address

270 DUFFY AVE HICKSVILLE N.Y 11801

Permit Number

NYD 05278
3988

Report Period

1/1/86 12/31/86

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
219P COLD STRIPPER	PAINT REMOVER	PACTUN # 4801	715 gal
212 COLD STRIPPER	PAINT REMOVER	PACTUN # 5222	330 gal
POLYELECTROTYPE	SOAP CLEANER	PACTUN # 7229	385 gal
359-T CLEANER	" "	PACTUN # 4800	450 gal
# 348 SOAK CLEANER	" "	PACTUN # 4877	1800 gal
BRASS ADDITIVE	BRASS PLATING	JELCO # 4875	310 gal
MURIATIC ACID	PLATING	KURTS + WOLF # 4787	800 lbs
AQUA AMMONIA	PLATING	KURTS + WOLF # 4783	2800 lbs.
ZINC CYANIDE	PLATING	KURTS + WOLF # 4785	600 lbs.
COPPER CYANIDE	PLATING	KURTS + WOLF # 4784	500 lbs.
SODIUM CYANIDE	PLATING	KURTS + WOLF # 4782	1400 lbs.
BUFFING COMPOUNDS	POLISHING METAL	MATCHLESS-UNITED	77,700 lbs.
56-1184 SPRAY GLUE	GLUEING LAMP SHADES	UNITED RESINS # 1507	7,000 lbs.
LBS WHITE GLUE	" " "	UNITED RESINS # 1452	5000 lbs.
32/13 MES VEG GLUE	" " "	UNITED RESINS # 1168	14,000 lbs.

FORM 2 - TANK REGISTRATION
SEE INSTRUCTION SHEETS

Date Application
Received

Facility

Reviewed
By

Date Review

Action: ☐ Not Req'd.
☐ Approved ☐ Disapproved

[illegible]

Facility Name ALSY MANUFACTURING Co. Inc.

Facility Address 270 DUFFY AVE. HICKSVILLE, N.Y. 11801

[illegible]

COUNTY DEPARTMENT OF HEALTH
 APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
 FORM 3 - BULK AND CONTAINER STORAGE REGISTRATION
 SEE INSTRUCTION SHEETS

Facility Name ALSY MANUFACTURING CO. INC.
 Facility Address 270 DUFFY AVE. HICKSVILLE, N.Y. 11801

Date Application Received _____
 Reviewed _____
 By _____
 Action: ☐ Not Required ☐ Approved ☐ Disapproved

Action: ☒ Register Existing Area ☐ Add Area ☐ Remove Area ☐ Modify Area Area No. 52 (Plating Chemicals)

Location: ☒ Indoors ☐ Outdoors Bulk Storage Max. Quantity Stored: _____ Container Storage Max. No. 25 Max. Vol. 700 gal + 1000

Secondary Containment: ☐ Impervious Berm/Dike ☐ Impervious Floor/Pad ☐ Roof ☐ Walls ☒ Floor Drain & Storage Tank ☐ None ☐ Other (Specify): _____

Construction Material (Check all that Apply) ☐ Concrete ☐ Steel ☐ Other (Specify): _____ Security ☐ Yes ☒ No

Type	NCDH Number	Material Name	Physical State	Amount Stored		Storage Method	
				Average Quantity	Units	Average Number	Type
1		BRASS plating solution additive	1	20	1	4	2
1		Nickle plating solution additive	1	20	1	4	2
1		Sulphuric Acid	1	6	1	6	2
1		Sodium Cyanide	2	200	3	1	2
1		Zinc Cyanide	2	100	3	1	2
1		Copper Cyanide	2	100	3		
1		Soap cleaner	1	25	1	1	1
		Soap cleaner (powder)	2	100	3		2
		Ammonium hydroxide	2	200	3	1	1

10 COUNTY DEPARTMENT OF HEALTH
 APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
 FORM 3 - BULK AND CONTAINER STORAGE REGISTRATION
 SEE INSTRUCTION SHEETS

For Office Use Only

Date Application Received	Facility I.
Reviewed By	Date Review
Action: <input type="checkbox"/> Not Req'd.	No. of Month
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	

Facility Name ALSY MANUFACTURING Co. Inc.
 Facility Address 270 DUFFY AVE. HICKSVILLE, N.Y. 11801

Action: ☒ Register Existing Area ☐ Add Area ☐ Remove Area ☐ Modify Area Area No. 53 (Paint Storage)

Location: ☒ Indoors ☐ Outdoors Bulk Storage Max. Quantity Stored: Container Storage Max. No. 225 Max. Vol. 1800 gallons

Secondary Containment: ☐ Impervious Berm/Dike ☐ Impervious Floor/Pad ☐ Roof ☒ Walls ☐ Floor Drain & Storage Tank ☐ None ☐ Other (Specify):

Construction Material (Check all that Apply) ☐ Concrete ☐ Steel ☐ Other (Specify): Security ☒ Yes ☐ No

Type	NCDH Number	Material Name	Physical State	Amount Stored		Storage Method	
				Average Quantity	Units	Average Number	Type
1		BAKING ENAMEL PAINT (VARIOUS COLORS)	1	750	1	150	2
1		ETCHING PAINT THINNER	1	25	1	1	1
1		ACE-TONE	1	25	1	1	1
1		409 LAQUOR THINNER	1	55	1	1	1
1		SPECIAL LAQUOR THINNER	1	25	1	1	1
1		150 PETROLEUM NAPHTHA	1	55	1	1	1
1		Xylene	1	25	1	1	1
1		CLEAR LAQUOR	1	250	1	50	2

For Office Use Only

ALSY MANUFACTURING CO. INC.

270 DUFFY AVE. HICKSVILLE, N.Y. 11801

Facility I.D.	
---------------	--

Date Reviewed _____

☐ Not Req'd.[illegible]

☒ Approved

☐ Disapproved

 Add Area

☐ Remove Area☐ **Modify Area**

Area No. 54 SHADE DEPT.

Bulk Storage

Max.Quantity Stored:

**Container
Storage**

Max. No. 2

Max. Vol. 110 gallons

Secondary
Containment:

☐ Impervious Berm/Dike

☐ Impervious Floor/Pad

Roof

Walls

☐ Floor Drain & Storage Tank

☒ None☐ Other
(Specify) :

Construction Material (Check all
of Dike & Pad that Apply)

☐ Concrete

Steel

Other

Other
(Specify):

Security ☐ Yes
☒ No

EH 859 4/86

Date : Submitted

3/27/87

Page

4 of 5

☐ D.F.

MASSACHUSETTS COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
FORM 2 - TANK REGISTRATION
SEE INSTRUCTION SHEETS

Facility Name ALSY MANUFACTURING CO. INC.
Facility Address 270 DUFFY AVE. HICKSVILLE, N.Y. 11801

For Office Use Only	
Date Application Received	Facility I.
Reviewed By	Date Review
Action: <input type="checkbox"/> Not Req'd.	No. of Month
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	

Action	Tank Number	Location	Design Capacity (Gallons)	Material of Construction					Type	Material Currently or Last Stored		Status	Tank Installation Date (Month/yr)	Leak Detection Sys.	Secondary Containment	Product Gauge	Dispenser Method	Fill	Additional Information for Abandoned Tanks	
				Internal	External	Protection	Piping			NCDH Number	Name								Date Last Used (Month/yr)	Condi-
1	27	1	600	1	2	4	8	2			Rinse water		0000	5	8	2	3	1		
	28	1	600	1	2	4	8	1			Soap solution		0000	5	8	2	3	1		
1	29	1	600	1	2	4	8	1			Soap solution		0000	5	8	2	3	1		
1	30	1	75	4	2	4	8	2			Rinse water slightly acid (PH-6)		0000	5	8	1	1	2		
	31	1	75	4	2	4	8	2			Rinse water for brass (PH-9)		0000	5	8	1	1	2		
	32	1	350	4	2	4	8	2			Brass rinse, Sodium hydroxide Sodium hypochlorite (PH 10.5-11.2)		0000	5	1	1	3	1		
	33	1	350	4	2	4	8	2			Acid rinse, cyanate, H ₂ SO ₄ , ferric chloride (PH 3.5-8.5)		0000	5	1	1	3	1		
	34	1	260	4	2	4	8	2			Solution of nickel and copper hydroxides (PH 9.5)		0000	5	1	1	3	2		
1	35	1	260	4	2	4	8	2			Floccing Agent, copper and nickel hydroxides		0000	5	1	1	3	2		
	36	1	150	4	2	4	8	2			Nickel and copper hydroxide in suspension		0000	5	1	1	1	2		
	37	1	175	1	1	4	8	2			Separates suspended hydroxides from clear liquid		0000	5	1	1	1	1		
	38	1	75	4	2	4	8	2			Water ready for discharge to sewer (PH-7)		0000	5	1	1	1	2		

Date Submitted 3/27/87 Page 3 of 4

☐ D.P.

COUNTY DEPARTMENT OF HEALTH
 APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
 FORM 2 - TANK REGISTRATION
 SEE INSTRUCTION SHEETS

Facility Name **ALSY MANUFACTURING CO. INC.**

Facility Address **270 DUFFY AVE. HICKSVILLE, N.Y. 11801**

Date Application Received

Facility I

Reviewed By

Date Review

Action: ☐ Not Req'd.

No. of Mont

☐ Approved ☐ Disapproved

Action	Tank Number	Location	Design Capacity (Gallons)	Material of Construction	Internal Protection	External Protection	Piping	Material Currently or Last Stored		Status	Tank Installation Date (Month/yr)	Leak Detection Sys.	Secondary Containment	Product Gauge	Dispenser Method	Fill	Additional Information for Abandon Tanks	
								NCDH Number	Name								Date Last Used (Month/yr)	Condi.
	14	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	15	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	16	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	17	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	18	1	1200	1	2	4	8	1	Brass plating solution		0 0 0 0	5	8	2	3	1		
	19	1	1200	1	2	4	8	1	Brass plating solution		0 0 0 0	5	8	2	3	1		
	20	1	1200	1	2	4	8	i	Brass plating solution		0 0 0 0	5	8	2	3	1		
	21	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	22	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	23	1	600	4	2	4	8	1	Hydrochloric Acid 20%		0 0 0 0	5	8	2	3	1		
	24	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	25	1	600	1	2	4	8	2	Rinse water		0 0 0 0	5	8	2	3	1		
	26	1	600	1	2	4	8	1	Soap solution		0 0 0 0	5	8	2	3	1		

COUNTY DEPARTMENT OF HEALTH
 APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
 FORM 2 - TANK REGISTRATION
 SEE INSTRUCTION SHEETS

For Office Use Only

Facility Name **ALSY MANUFACTURING CO. INC.**

Facility Address **270 DUFFY AVE. HORSVILLE, N.Y. 11801**

Date Application Received

Facility I.

Reviewed By

Date Review

Action:

☐ Not Req'd.

No. of Month

☐ Approved

☐ Disapproved

Action	Tank Number	Location	Design Capacity (Gallons)	Material of Construction	Internal Protection	External Protection	Piping	Type	Material Currently or Last Stored		Status	Tank Installation Date (Month/yr)	Leak Detection Sys.	Secondary Containment	Product Gauge	Dispenser Method	Fill	Additional Information for Abandoned Tanks	
									NCDH Number	Name								Date Last Used (Month/yr)	Condi-
1	51	4	3500	1	9	9	9	1		FUEL OIL	1	0000	5	5	2	2	1		
1	52	4	1000	1	9	9	9	1		FUEL OIL	1	0000	5	5	1	2	1		
1	53	1	275	1	9	4	9	1		III TRICHLORITHANE	1	0000	5	5	1	3	1		
	4	1	600	1	2	4	8	2		Rinse Water	1	0000	5	8	2	3	1		
	5	1	600	1	2	4	8	2		Rinse Water	1	0000	5	8	2	3	1		
	6	1	600	1	2	4	8	2		Rinse Water	1	0000	5	8	2	3	1		
	7	1	600	1	2	4	8	1		Brass plating solution	1	0000	5	8	2	3	1		
	8	1	600	1	2	4	8	2		Rinse Water	1	0000	5	8	2	3	1		
	9	1	600	1	2	4	8	2		Rinse Water	1	0000	5	8	2	3	1		
	10	1	600	2	2	4	8	1		Dilute nickle plating sol.	1	0000	5	8	2	3	1		
	11	1	600	2	2	4	8	1		Nickle plating solution	1	0000	5	8	2	3	1		
	12	1	600	2	2	4	8	1		Nickle plating solution	1	0000	5	8	2	3	1		
	13	1	425	1	1	4	8	2		Rinse water	1	0000	5	8	2	3	1		

Facility Name ALSY MANUFACTURING CO. INC.
Facility Address 270 DUFFY AVE. HICKSVILLE, N.Y. 11801

Date Application Received	Facility I.D.
Reviewed By	Date Reviewed
Action: <input type="checkbox"/> Not Req'd. <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	No. of Months

Action:		<input checked="" type="checkbox"/> Register Existing Area		<input type="checkbox"/> Add Area		<input type="checkbox"/> Remove Area		<input type="checkbox"/> Modify Area		Area No. <u>55</u>		WASTE WATER TREATMENT CHEM.	
Location:		<input checked="" type="checkbox"/> Indoors		<input type="checkbox"/> Outdoors		Bulk Storage		Max. Quantity Stored:		Container Storage		Max. No. <u>7</u> Max. Vol. <u>320</u> gallon	
Secondary Containment:		<input checked="" type="checkbox"/> Impervious Berm/Dike		<input type="checkbox"/> Impervious Floor/Pad		<input type="checkbox"/> Roof		<input type="checkbox"/> Walls		<input type="checkbox"/> Floor Drain & Storage Tank		<input type="checkbox"/> None <input type="checkbox"/> Other (Specify):	
Construction Material of Dike & Pad		(Check all that Apply)		<input checked="" type="checkbox"/> Concrete		<input type="checkbox"/> Steel		<input checked="" type="checkbox"/> Other (Specify): <u>FIBERGLASS</u>		Security		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

[illegible]



COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501

SEWER PERMIT

May 15, 1987

to

May 15 1990

April 16, 1987

Mr. A. Gindel
President
Alsy Manufacturing, Inc.
270 Duffy Avenue
Hicksville, NY 11801

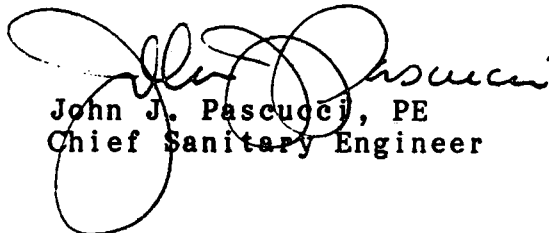
Re: Industrial Discharge Permit No. 21

Dear Mr. Gindel:

Enclosed herewith, please find the Industrial Discharge Permit issued on April 16, 1987 for your company and certification which should be signed and returned to us.

Thank you for your cooperation.

Very truly yours,


John J. Pascucci, PE
Chief Sanitary Engineer

JJP:IA:sm
encl.

cc: James A. Oliva, PE
Maurice J. Osman

NOTE: Please read carefully since only one certification should be signed.

CERTIFICATION

Based on my inquiry of the person directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report.

I certify also that this facility is implementing it's "Emergency Response Contingency Plan" and will notify the County of any changes made in our use of toxic organics.

Signature: Robert Gentile
Name of certifying official: R ROBERT GENTILE
Title: Vice President - Finance
Date: 5/18/87

CERTIFICATION

I certify that, to the best of my knowledge, the regulated toxic organics are not used at this facility and not expected to be discharged into the Public Sewer or underground.

Signature: _____
Name of certifying official: _____
Title: _____
Date: _____

POTW APPROVAL OF PLAN:

Nassau County Department of Public Works hereby approves the Spill Prevention Control and Solvent Management Plan as submitted.

Copies of this plan must be maintained at the facility and submitted to all local governmental units that might be called upon in the event of an emergency.

John J. Pascucci, P.E., Chief Sanitary Engineer

Date _____, 19__

NASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS

Division of Sanitation and Water Supply
Industrial Pretreatment Program
Cedar Creek Plant, P.O. Box 88, Wantagh, NY 11793

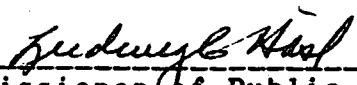
INDUSTRIAL DISCHARGE PERMIT NO. 21
This Permit Is Not Transferable

Fee: \$20.00

Effective Date: May 15, 1987

Expires: May 15, 1990

Amendment to Sewer Connection Permit:
No. S113436



Commissioner of Public Works
Ludwig C. Hasl, P.E. *LM*

In compliance with the requirements of the Federal Water Pollution Control Act (also known as the Clean Water Act as amended), Nassau County Ordinance No. 266-1985, categorical and local discharge limitations, in accordance with your application completed on 86/06/26 and other conditions set forth herein:

Company: Alsy Manufacturing, Inc.

IPP ID#: 33109903

Description: Lamps & lampshades (electroplating, machining, assembly)

Classified by SIC Codes: 3645 3471

Subject to categorical pretreatment standards: Y [X] N []

Name of standards: Electroplating (over 10,000 gpd)

Effective date of compliance: 04-27-84/07-15-86 (TTO)

is permitted to discharge wastewater from its facilities located at
270 Duffy Avenue, Hicksville NY 11801
(Section, Block, Lot: 1100600148/0191)

into the sewers tributary to Cedar Creek Water Pollution Control Plant.

The Applicant agrees to:

1. Discharge wastewater only in accordance with the terms and conditions of this Permit and comply with all the requirements of Nassau County Ordinance No. 266-1985 and appropriate categorical limitations (more stringent limitations shall apply).

2. Provide complete cooperation to the County, its employees, agents and representatives allowing reasonable access to the plant and pretreatment facilities for all inspections including, but not limited to, measurement and sampling of wastewater.

3. Maintain all records relating to the wastewater discharge flow rate, sampling results and methods of analyses for a minimum of three (3) years.

4. Provide the Department of Public Works as far in advance as is reasonably practicable all information relating to any actual or proposed material change in:

- a) Volume of discharge (gpd)
- b) Processes or chemicals used at the facility
- c) Pretreatment facilities
- d) Average daily rate of production
- e) Content of discharge
- f) New sewer connection
- g) Expansion or new construction
- h) Termination of discharge

5. Submit a "Semi-annual Compliance Report" twice a year. Forms along with analyses results of industrial wastewater discharge will be furnished to the Applicant by the County and must be returned by certified mail no later than one month from their receipt.

In those instances when the Applicant's facility exceeded its discharge limitations at least twice consecutively during the past six months, a "Schedule of Compliance" must also be submitted.

Any delay in the submission of these reports in excess of forty-five (45) days from the date of receipt, or self-monitoring data if required, or implementing the "Schedule of Compliance", shall be deemed a violation of this Permit and the Applicant will be subject to a fine and/or civil action at the discretion of the Commissioner.

6. Pay for each monitoring inspection and sampling procedure following notification of violation of the discharge limitations contained herein. The fee for such inspection and/or procedure shall vary in amount from a minimum of not less than One Hundred Dollars (\$100) to a maximum of not more than Five Hundred Dollars (\$500) depending upon the continued nature of the violation.

7. Operate the pretreatment facilities in an efficient manner at all times. By-passes of pretreatment facilities are strictly prohibited.

Applicant shall provide appropriate storage facilities to prevent an accidental discharge of prohibited materials or slug loading.

Notify the Department of Public Works orally within twenty-four (24) hours of any accidental discharge of prohibited materials or slug loading. All of the Applicant's employees, agents, and representatives shall be notified of the foregoing emergency notification procedure.

This notice must be followed immediately thereafter with a detailed written report of each such incident including a description of its causes and duration as well as any preventive measures undertaken. Failure to notify DPW about any such incident in the proper manner within five working days will be considered as a violation of this Permit.

This notification shall not relieve the Applicant of any expense, loss, damage or other liability incurred as a result of damage to any person, collection system and/or processes at the POTW.

8. Any employee, agent or representative of the Applicant who knowingly or negligently makes a false statement, or renders inaccurate any monitoring device shall be subject to a fine of not less than Three Hundred Dollars (\$300) nor more than One Thousand Dollars (\$1,000) per day and/or imprisonment for a period of not more than six months for each such violation.

The imposition of a penalty pursuant to the foregoing paragraphs shall result in the probation of this Permit. Accordingly, the Applicant shall immediately cease violation and undertake whatever corrective measures are warranted.

9. In the event the Applicant, its employees, agents or representatives continue to exceed its discharge limitations during the probationary period, or is unwilling to comply with its Schedule of Compliance, the County Attorney will immediately commence appropriate legal action to terminate the Applicant's authorization to dispose of industrial wastewater into the Public Sewer system.

10. The Applicant shall apply for the Discharge Permit reissuance a minimum of 180 days prior to the expiration date of the existing Permit. The terms and conditions of the Permit may be subject to modification by the County during the term of the Permit. The Applicant shall be informed of any proposed changes at least 30 days prior to the effective date of change.

11. Additional requirements:

The Applicant shall install, operate and maintain in proper working order at all times the following equipment necessary to monitor the industrial wastewater discharged to the Public Sewer:

Testing Chamber required:	Y [X]	N []
Locking Device required:	Y [X]	N []
Flowmeter required:	Y [X]	N []
Self-Monitoring required:	Y [X]	N []
Frequency of Self-Monitoring:		
Monthly []	Quarterly [X]	Semiannually []

Draft Permit approved by the Chief Sanitary Engineer on behalf of the Nassau County Industrial Pretreatment Program:

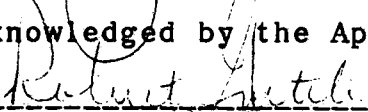


John J. Pascucci, P.E.

4/1/87

(Date)

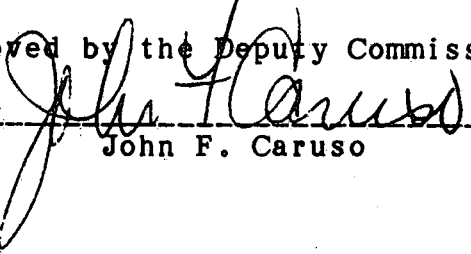
Acknowledged by the Applicant Representative



Title: Vice President - Finance

4/1/87

(Date)

Final Permit approved by the Deputy Commissioner
of Public Works: 

John F. Caruso

4/9/87

(Date)

Attachments to this Permit: 1. Prohibited wastes
2. Discharge limitations (page 8)

Attachment No. 1

PROHIBITED WASTES

No person shall discharge, deposit, cause or allow to be deposited or discharged into the Public Sewer or the POTW any waste which causes or contains the following:

1.a EXPLOSIVE WASTES:

Wastes which create a fire or explosive hazard to the POTW, collection system or the operation of the system. Prohibited materials include, but are not limited to, gasoline, fuel oil, kerosene, naptha, benzene, toluene, alcohols, peroxides, carbides, xylene, and ethers.

1.b CORROSIVE WASTES:

Wastes which cause corrosion or deterioration of the equipment of the Treatment Plant or collection system, such as sulfides and concentrated acids. All wastes shall have a pH not less than 5.5 or greater than 9.5.

1.c SOLIDS AND VISCOUS SUBSTANCES:

Solids or viscous wastes in amounts which could cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the POTW. Prohibited materials include, but are not limited to, grease, wax, uncomminuted garbage, sludge of any kind, mud, ashes, cinders, sand, glass grinding, polishing waste, stone or marble dust, wood sawdust, plastics, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, or metal scrap.

1.d EXTREMELY HAZARDOUS WASTES:

Those wastes designated by the USEPA as sufficiently toxic that they shall not be discharged to a sanitary sewer in any concentration.

1.e RADIOACTIVE WASTES:

Radioactive wastes or isotopes of such half life of concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which cause hazards to the personnel operating the sewerage system or POTW.

Attachment No. 1

1.f NOXIOUS MATERIALS:

Noxious or malodorous compounds which, either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or may be sufficient to prevent entry into a sewer for its maintenance or repair.

1.g EXCESSIVE DISCOLORATION:

Such as, but not limited to, dye wastes, tanning solutions, etc.

1.h HEAT:

No discharge having temperature higher than 150 degrees Fahrenheit (65 degrees Celsius) is allowed.

1.i EXTREME VARIATIONS:

Industrial wastes discharged in a slug of such volume or strength that may cause a treatment process upset or loss of the POTW efficiency.

1.j UNPOLLUTED WASTES:

Any unpolluted water including, but not limited to, stormwater, surface and groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process water which will increase the hydraulic load on the POTW.

1.k DILUTION WATER:

No water shall be added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limits.

DISCHARGED LIMITATIONS BASED ON CATEGORICAL AND LOCAL LIMITS

PARAMETERS	MAXIMUM CONCENTRATION OF INDUSTRIAL WASTE DISCHARGE TO THE PUBLIC SEWER mg/l	CATEGORICAL STANDARD APPLIED AT THE POINT OF DISCHARGE FROM THE REGULATED OPERATION	
		DAILY MAXIMUM mg/l	MAXIMUM 4 DAY AVERAGE mg/l
Oil/Grease (O/G)	100		
pH - maximum	9.5		
pH - minimum	5.5		
Antimony (Sb)	0.18		
Arsenic (As)	0.1		
Barium (Ba)	2.0		
Cadmium (Cd)	0.2	1.2	0.7
Chromium-total (Cr,T)	2.0	7.0	4.0
Chromium-hex (CR+6)	0.1		
Copper (Cu)	2.0	4.5	2.7
Cyanide (Cn, Total)	1.0	1.9	1.0
Fluoride (Fl)	10.0		
Iron (Fe)	4.0		
Lead (Pb)	0.1	0.6	0.4
Manganese (Mn)	2.0		
Mercury (Hg)	0.1		
Nickel (Ni)	2.0	4.1	2.6
Selenium (Se)	0.1		
Silver (Ag)	0.1		
Zinc (Zn)	5.0	4.2	2.6
Phenols			
Total Toxic Organics (TTO)		2.13	-

Note: 1. The term "TTO" shall mean the sum of concentrations for each of the compounds regulated for the industry found in the discharge of your facility at a concentration greater than 0.01 mg/l (10 ppb).

If no toxic organics are used in the processes and expected to be discharged in the Public Sewer, it should be certified in the Spill Prevention and Solvent Management Plan and no TTO monitoring is required in this case.

2. Categorical limit for Cyanide applies to Cyanide amenable to chlorination.

PERMIT NO. 21

RESULTS OF SAMPLING AND ANALYSES FOR PAST_12_MONTHS

Date	Limit mg/l	01/07	01/14	02/11	02/17	03/04	03/27
Source	C/I	I	I	I	I	I	I
BOD							
COD							
TDS							
SS							
pH max	9.5						
pH act		7.07	6.04	6.34	6.53	6.76	6.88
pH min	5.5						
O/G	100						
Pb	0.1						
Cn	1.0	0.31	0.13	1.35	1.22	2.16	0.10
Cd	0.2						
Ag	0.1						
Cr+6	0.1						
Cr,T	2.0						
Ni	2.0	4.95	0.17	1.88	6.02	2.48	0.40
Zn	5.0	0.08	1.27	0.34	0.31	0.33	0.49
Cu	2.0	3.36	3.67	1.24	1.95	1.95	2.60
Fe	4.0						
Fl	10.0						
Se	0.1						
As	0.1						
Sn							
NH3-N	20.0	8.08	10.43	4.14	10.89	19.03	20.79
Phenols							
VOH							
BTX							
TIO							
Misc.							

- Notes:
1. "VOH" means the sum of measurable amounts of halogenated, or volatile, organics in mg/l.
 2. "BTX" means the sum of measurable amounts of aromatic hydrocarbons (Benzene, Toluene, Xylene, Naphtalene, etc.) in mg/l.
 3. "TIO" means the sum of concentrations for each of the compounds regulated for the industry found in the discharge of your facility at a concentration greater than 0.01 mg/l (10 ppb).

PERMIT NO. 21

RESULTS OF SAMPLING AND ANALYSES FOR PAST_12_MONTHS

Date	Limit mg/l	04/07	04/15	04/22	06/26	07/23	10/02
Source	C/I	C	I	I	I	C	C
BOD							
COD							
TDS							
SS							
pH max	9.5						
pH act		5.7	5.88	6.16	6.6	6.5	7.2
pH min	5.5						
O/G	100						
Pb	0.1				0.03	0.0	0.00
Cn	1.0	0.1	0.15	0.04	0.22	0.0	0.0
Cd	0.2				<0.003	0.0	
Ag	0.1				<0.006		
Cr+6	0.1					<0.01	0.01
Cr,T	2.0				0.02	0.0	0.01
Ni	2.0	0.2	0.42	0.38	0.08	0.0	0.07
Zn	5.0	0.7	0.85	0.50	0.19	0.0	0.14
Cu	2.0	2.4	4.53	2.47	1.11	0.1	0.42
Fe	4.0						
Fl	10.0						
Se	0.1						
As	0.1						
Sn							
NH3-N	20.0		5.90	17.34	27.92		
Phenols							
VOH							0.08
BTX							0.01
TTO							0.09
Misc.							

- Notes:
1. "VOH" means the sum of measurable amounts of halogenated, or volatile, organics in mg/l.
 2. "BTX" means the sum of measurable amounts of aromatic hydrocarbons (Benzene, Toluene, Xylene, Naphtalene, etc.) in mg/l.
 3. "TTO" means the sum of concentrations for each of the compounds regulated for the industry found in the discharge of your facility at a concentration greater than 0.01 mg/l (10 ppb).

REFERENCE #12

CONTROL NO:

DATE:

5/26/87

TIME:

0945

DISTRIBUTION:

02-8705-10

Alsy Manufacturing

BETWEEN:

Bill O'Brien

OF:

NYDEC
Stoneybrook

PHONE:

(516) 751-7900

AND:

John Ducar

(NUS)

DISCUSSION:

I spoke to Mr. O'Brien about his inspection of the site on 8/1/84. He told me the plant is a manufacturer of lamps and that it had a past history of very poor housekeeping practices. He said the treatment system for the wastes was almost non-existent at the time of the inspection. There was evidence of discharge directly to the ground of solvent and heavy metal wastes. Samples of the cess pools showed very high levels of solvents and heavy metals. There are 3 monitoring wells on site. He said in 1986 Alsy got a permit to discharge into the sanitary sewer system. He said

ACTION ITEMS:

that public wells down gradient at the site have shown possible contamination that may be ^{attributed} to the plant. He said I should talk ^{to} to Richard Torrey, of the Albany DEC (518)-457-5637 for more ^{uses} information on the site. The whole area ^{is} ~~is~~ groundwater as a drinking source.

NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO:

DATE:

6/2/87

TIME:

1630

DISTRIBUTION: 02-8705-10

Alsy Manufacturing

BETWEEN:

Bill O'Brien

OF:

Stonybrook
DEC

PHONE:

(516) 751-7900

AND:

John Ducar

DISCUSSION:

Mr. O'Brien called me and gave me some more information on the site. He said there are 3 wells on site, 4" PVC casing. The wells were installed incorrectly according to Dick Torrey of the NYDEC in Albany, he said. There are no real upgradient or downgradient wells on the site, they are situated near the cesspools. He also told me the original owner of the property in the 1950's + 60's was probably a heavy machinery manufacturer, but no one is really sure. He said the site has one very large interconnected building. He told me the stained soil, where the

ACTION ITEMS:

drums used to be stored, ~~have~~ ^{has} been paved over. The topography of the site is relatively flat. The 3 old cesspools are no longer in use, but one ^{sapitany} cesspool on site is used for containing cycle & solvents.

REFERENCE #13

NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO:

DATE:

12-1-87

TIME:

0930

DISTRIBUTION:

Alsy Manufacturing
02-8705-100

BETWEEN:

Don Ryott

OF: Nassau County
Health Dept. Bureau
of Public Water

PHONE:

(516) 535-3324

AND:

John Ducar

DISCUSSION:

I spoke with Mr. Ryott concerning
the depths of the two aquifers in the
Nicksville Area.

He told me the Upper Glacial Aquifer
is at a depth of 100-150 ft. below the
surface and the Magothy Aquifer is
~~200~~⁵⁰ - 200 ft below the surface.

ACTION ITEMS:

REFERENCE #14

60

Data List of Dataset: NYT7 Number of Records = 6

REC #	POP	HOUSE	DISTANCE	SECTOR
1	1400	410	0.400000	1
2	1022	304	0.810000	1
3	11189	3456	1.60000	1
4	59660	18127	3.20000	1
5	64688	19560	4.80000	1
6	91024	26183	6.40000	1

Press RETURN to page forward, enter Pnnn to position the starting record
of the next page, enter BACK to reselect variables, or enter END to stop
?

REFERENCE #15

In reply to your inquiry dated August 28, 1987,
please refer to the item checked below.

XXX AN INVESTIGATION WAS CONDUCTED BY THIS OFFICE AS FOLLOWS:

Inv. No. 796-85 Date of Alarm 10-10-35 Time of Alarm 1102 hours

Address 270 DUFFY AVENUE, HICKSVILLE

Classification ELECTRICAL

Investigator J. LYNCH

Fire at _____
Date of Alarm _____ Time of Alarm _____
Cause _____

NO REPORT AT THIS OFFICE OF A FIRE AT _____

PLEASE NOTE: FOR FUTURE CORRESPONDENCE, PLEASE ENCLOSE A STAMPED, SELF-ADDRESSED ENVELOPE.

00378I
9/86

FRANCIS T. PURCELL
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL



NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

In reply to your inquiry dated August 28, 1987,
please refer to the item checked below.

If additional information is required, please call this office
and arrange for an appointment with the investigator.

XXX AN INVESTIGATION WAS CONDUCTED BY THIS OFFICE AS FOLLOWS:

Inv. No. 883-31 Date of Alarm 8-30-81 Time of Alarm 2222 hours
Address 270 DUFFY AVENUE, HICKSVILLE - DUMPSTER TRAILED ON PROPERTY
Classification SUSPICIOUS
Investigator R. PEUSMANN

LOCAL FIRE DEPARTMENT REPORT FILED WITH THIS OFFICE INDICATES:

Fire at _____
Date of Alarm _____ Time of Alarm _____
Cause _____

NO REPORT AT THIS OFFICE OF A FIRE AT _____

INSUFFICIENT INFORMATION.

PLEASE NOTE: FOR FUTURE CORRESPONDENCE, PLEASE ENCLOSE A STAMPED,
SELF-ADDRESSED ENVELOPE.

Joseph G. Boslet, Jr.
Fire Marshal

003781
9/86

FRANCIS T. PURCELL
COUNTY EXECUTIVE
JOSEPH G. BOSLET, JR.
FIRE MARSHAL



NASSAU COUNTY FIRE COMMISSION
OFFICE OF FIRE MARSHAL
899 JERUSALEM AVENUE
P.O. BOX 128
UNIONDALE, NEW YORK 11553

In reply to your inquiry dated August 28, 1987,
please refer to the item checked below.

If additional information is required, please call this office
and arrange for an appointment with the investigator.

XXX AN INVESTIGATION WAS CONDUCTED BY THIS OFFICE AS FOLLOWS:

Inv. No. 847-84 Date of Alarm 10-29-84 Time of Alarm 2030 hours
Address 270 DUFFY AVENUE, HICKSVILLE
Classification SPONTANEOUS IGNITION
Investigator G. CARONIA

LOCAL FIRE DEPARTMENT REPORT FILED WITH THIS OFFICE INDICATES:

Fire at _____
Date of Alarm _____ Time of Alarm _____
Cause _____

NO REPORT AT THIS OFFICE OF A FIRE AT _____

INSUFFICIENT INFORMATION.

PLEASE NOTE: FOR FUTURE CORRESPONDENCE, PLEASE ENCLOSE A STAMPED,
SELF-ADDRESSED ENVELOPE.

Joseph G. Boslet, Jr.
Fire Marshal

003781
9/86

REFERENCE #17

ANALYTICAL DATA

NAME: ALSY MANUFACTURING

SAMPLING DATE: 6/16/87

CASE NUMBER: 7459

VOLATILES

SAMPLE NUMBER	NYT7-GM1	NYT7-GM2	NYT7-BL1	NYT7-SW1	NYT7-S1	NYT7-S2	NYT7-S3	NYT7-S4	NYT7-SED1	NYT7-SED2
TRAFFIC REPORT NUMBER	BJ 850	BK264	BK 271	BK 273	BK 270	BK 269	BK 265	BK 266	BK 268	BK 272
MATRIX	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	ug/L	ug/L	ug/L	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
CONC./DILUTION FACTOR	5	1	1	1	1	1	1	1	1	5
Chloromethane										
Bromomethane										
Vinyl Chloride										
Chloroethane										
Methylene Chloride	Q	Q	Q	Q	Q	Q	Q	Q	Q	99 B
Acetone	Q	Q	Q	Q	Q	Q	Q	88 B	Q	1500 B
Carbon Disulfide										27
1,1-Dichloroethene		Q	Q	Q	Q	Q	Q	Q	Q	
1,1-Dichloroethane	5 J									
Trans-1,2-Dichloroethene										
Chloroform	Q	Q	Q	Q	Q	Q	Q	15 B	Q	160 B
1,2-Dichloroethane										
2-Butanone										
1,1,1-Trichloroethane	60	140		J		J	J		J	
Carbon Tetrachloride										
Vinyl Acetate										
Bromodichloromethane										
1,2-Dichloropropane										
Trans-1,3-Dichloropropene										
Trichloroethene	18 J	J			Q	J	J	Q		
Dibromochloromethane										
1,1,2-Trichloroethane										
Benzene		Q	Q	Q		Q	Q	Q	Q	
Cis-1,3-Dichloropropene										
2-Chloroethylvinylether										
Bromoform								Q		
2-Hexanone										
4-Methyl-2-Pentanone										
Tetrachloroethene	680 B	Q	Q	84 B				Q		35
1,1,2,2-Tetrachloroethane										
Toluene		Q	Q		Q	7	J	Q		3000 B
Chlorobenzene										850
Ethylbenzene										
Styrene										
Total Xylenes						J, B				6200

NOTES TO ORGANICS DATA:

Blank space - compound analyzed for but not detected

Q - analysis did not pass EPA QA/QC requirements

J - compound present below contract-specified detection limits,
but above instrument detection limitB - compound found in laboratory blank as well as the sample,
and indicates possible/probable blank contamination

E - estimated value due to the presence of interference

NR - analysis not required

CASE NUMBER: 7459

[illegible]

ANALYTICAL DATA

NAME: ALSY MANUFACTURING

SAMPLING DATE: 6/16/87

CASE NUMBER: 7459

SEMI-VOLATILES

SAMPLE NUMBER	NYT7-GM1	NYT7-GM2	NYT7-BL1	NYT7-SM1	NYT7-S1	NYT7-S2	NYT7-S3	NYT7-S4	NYT7-SED1	NYT7-SED2
TRAFFIC REPORT NUMBER	BJ 850	BK264	BK 271	BK 273	BK 270	BK 269	BK 265	BK 266	BK 268	BK 272
MATRIX	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	ug/L	ug/L	ug/L	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
CONC. /DILUTION FACTOR	1	1	1	1	1	1	1	10	1	10
Pentachlorophenol					J	J	J	250 J		
Phenanthrene										
Anthracene										
Di-n-Butylphthalate					2000	J	J	1400 J	J	58000
Fluoranthene					J	J	J	830 J	J	
Pyrene					J	J	J	490 J	J	
Butylbenzylphthalate					2100	J		240 J	J	600 J
3,3'-Dichlorobenzidine										
Benzo(a)Anthracene					Q	J	Q			
Bis(2-Ethylhexyl)Phthalate					790	5900	Q	44000	2800	840 J
Chrysene					J	J	J	480 J		
Di-n-Octyl Phthalate					J	Q		140 J		
Benzo(b)Fluoranthene						J	J	440 J		
Benzo(k)Fluoranthene						J	J			
Benzo(a)Pyrene								280 J		
Indeno(1,2,3-cd)Pyrene										
Dibenzo(a,h)Anthracene										
Benzo(ghi)Perylene										

NOTES TO ORGANICS DATA:

Blank space - compound analyzed for but not detected

Q - analysis did not pass EPA QA/QC requirements

J - compound present below contract-specified detection limits,
but above instrument detection limitB - compound found in laboratory blank as well as the sample,
and indicates possible/probable blank contamination

E - estimated value due to the presence of interference

NR - analysis not required

ANALYTICAL DATA
NAME: ALSY MANUFACTURING
SAMPLING DATE: 6/16/87
CASE NUMBER: 7459

PESTICIDES/PCBs

SAMPLE NUMBER	INYT7-GW1	INYT7-GW2	INYT7-BL1	INYT7-SW1	NYT7-S1	NYT7-S2	NYT7-S3	NYT7-S4	INYT7-SED1	INYT7-SED2
TRAFFIC REPORT NUMBER	BJ 850	BK264	BK 271	BK 273	BK 270	BK 269	BK 265	BK 266	BK 268	BK 272
MATRIX	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	ug/L	ug/L	ug/L	ug/L	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
CONC./DILUTION FACTOR	1	1	1	1	1	1	1	20	1	1
Alpha-BHC										
Beta-BHC										
Delta-BHC										
Gamma-BHC (Lindane)										
Heptachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4'-DDE					18		170		0	
Endrin										
Endosulfan II										
4,4'-DDD							53			
Endosulfan sulfate										
4,4'-DDT							210			
Methoxychlor										
Endrin Ketone										
Chlordane										
Toxaphene										
Aroclor-1016										
Aroclor-1221										
Aroclor-1232										
Aroclor-1242										
Aroclor-1248										
Aroclor-1254								16000	170	
Aroclor-1260					1000	3900				

NOTES TO ORGANICS DATA:

- Blank space - compound analyzed for but not detected
- Q - analysis did not pass EPA QA/QC requirements
- J - compound present below contract-specified detection limits, but above instrument detection limit
- B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
- E - estimated value due to the presence of interference
- NR - analysis not required



U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office

ORGANICS TRAFFIC REPORT

Sample Number

BJ 850

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☒ Water
☐ Soil/Sediment

④ Ship To:

Yack Laboratories
200 Monroe Turnpike
Monroe, CT 06468

Attn: John Culick

Transfer

Ship To:

⑤ Regional Office: EIT 2

Sampling Personnel:

RANDY RICE

(Name)

(201) 225-6160

(Phone)

Sampling Date:

6/16/87 6/16/87

(Begin)

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	⑪ Analysis Lab: Rec'd by: <i>al. [unclear]</i> Date Rec'd: <i>6/17/87</i> Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
Water (Extractable)	6	480	OK - no Taps
Water (VOA)	4	160	OK - no Taps 4 have air
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑦ Shipping Information

Federal Express

Name of Carrier

6/16/87

Date Shipped:

4486830655

Airbill Number:

⑧ Sample Description

☒ Surface Water ☐ Mixed Media
☒ Ground Water ☐ Solids
☐ Leachate ☒ Other (specify) *asphalt*

⑨ Sample Location

GW-1

MATCHES
INORGANIC SAMPLE MBTG50

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

LAB FILE COPY

Organics Analysis Data Sheet
(Page 1)

BJ 850

0 0 32

Laboratory Name: YORK
Lab Sample ID No: 1086001
Sample Matrix: WATER
Data Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6-18-87
Date Analyzed: 6-18-87
Conc/Dil Factor: 5.0 pH N/A
Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50U
74-83-9	Bromomethane	↓ ↓
75-01-4	Vinyl Chloride	↓ ↓
75-00-3	Chloroethane	↓ ↓
75-09-2	Methylene Chloride	NB
67-64-1	Acetone	NB
75-15-0	Carbon Disulfide	25U
75-35-4	1, 1-Dichloroethene	NB
75-34-3	1, 1-Dichloroethane	5J
156-60-5	Trans-1, 2-Dichloroethene	25U
67-66-3	Chloroform	NB
107-06-2	1, 2-Dichloroethane	25U
78-93-3	2-Butanone	50U
71-55-6	1, 1, 1-Trichloroethane	60 25U
56-23-5	Carbon Tetrachloride	25U
108-05-4	Vinyl Acetate	50U
75-27-4	Bromodichloromethane	25U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	25U
10061-02-6	Trans-1, 3-Dichloropropene	25U
79-01-6	Trichloroethene	18J
124-48-1	Dibromochloromethane	25U
79-00-5	1, 1, 2-Trichloroethane	↓ ↓
71-43-2	Benzene	↓ ↓
10061-01-5	cis-1, 3-Dichloropropene	↓ ↓
110-75-8	2-Chloroethylvinylether	50U
75-25-2	Bromoform	25U
108-10-1	4-Methyl-2-Pentanone	50U
591-78-6	2-Hexanone	50U
127-18-4	Tetrachloroethene	680B
79-34-5	1, 1, 2, 2-Tetrachloroethane	25U
108-88-3	Toluene	NB
108-90-7	Chlorobenzene	25U
100-41-4	Ethylbenzene	↓ ↓
100-42-5	Styrene	↓ ↓
	Total Xylenes	↓ ↓

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Story Name: YORK LABORATORIES
No: 7495

Sample Number

BJ 850

33

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOL		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Agency Name: York Labs
 No: EPA 7495

Sample Number
55850

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 06-18-87
 Date Analyzed: 07-02-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) N/A

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☒ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
99638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
7-72-1	Hexachloroethane	
88-95-3	Nitrobenzene	
78-59-1	Isophorone	
8-75-5	2-Nitrophenol	
05-67-9	2, 4-Dimethylphenol	✓✓
65-85-0	Benzoic Acid	50u
11-91-1	bis(2-Chloroethoxy)Methane	10u
20-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
14-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
37-68-3	Hexachlorobutadiene	
28-50-7	4-Chloro-3-Methylphenol	
15-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
28-06-2	2, 4, 6-Trichlorophenol	✓✓
19-95-4	2, 4, 6-Trichlorophenol	50u
11-58-7	2-Chloronaphthalene	10u
18-74-4	2-Nitroaniline	50u
11-11-3	Dimethyl Phthalate	10u
18-96-8	Acenaphthylene	10u
9-09-2	3-Nitroaniline	50u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7008-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	✓✓
100-01-6	4-Nitroaniline	50u
534-92-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	(N-Nitrosodiphenylamine (1)	10u
101-85-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	✓✓
87-66-8	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
208-44-0	Fluoranthene	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	✓✓
91-84-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethoxy)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	=
181-24-2	Benzo(g, h, i)Perylene	✓✓

(1) - Cannot be separated from diphenylamine

Laboratory Name: York LabsCase No. 7495

Sample Number

BJ 850

Organics Analysis Data Sheet

(Page 3)

0.0 35

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)Date Extracted/Prepared: 6/19/87Date Analyzed: 6/29/87Conc/Dil Factor: 1.0Percent Moisture (decanted) NAGPC Cleanup ☐ Yes ☒ NoSeparatory Funnel Extraction ☒ YesContinuous Liquid - Liquid Extraction ☐ YesCAS
Numberug/l or ug/Kg
(Circle One)

319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.5u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.5u
11104-28-2	Aroclor-1221	0.5u
11141-16-5	Aroclor-1232	0.5u
53469-21-9	Aroclor-1242	0.5u
12672-29-6	Aroclor-1248	0.5u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

 V_i = Volume of extract injected (ul) V_s = Volume of water extracted (ml) W_s = Weight of sample extracted (g) V_t = Volume of total extract (ul) V_s 1000. or W_s _____ V_t 10,000. V_i 4.0 2.07/16/87

York Laboratories
A. Name: EPA 7495

Sample Number
BJ850

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123911	1,4-DIOXANE	BNA	5.05	27
12.		BNA	7.43	180
13.	ALDOL COND. PROD.	BNA	8.10	33
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				



ORGANICS TRAFFIC REPORT

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☒ Water
☐ Soil/Sediment

④ Ship To: 0 0 88

York Laboratories
300 Menice Turnpike
Monroe, CT 06468

Attn: John Culick

Transfer

Ship To:

⑤ Regional Office: EIT2

Sampling Personnel:

RANDY RICE

(Name)

(201) 225-6160

(Phone)

Sampling Date:

6/16/87

(Begin)

6/16/87

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)	3	240 oz.
Water (VOA)	2	80 ml.

⑪ Analysis Lab:

Rec'd by: W. SampleDate Rec'd: 6/17/87

Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

OK - No Tags

OK - No Tags

1 bag air

⑦ Shipping Information

Soil/Sediment (Extractable)

Soil/Sediment (VOA)

Other

Federal Express

Name of Carrier

6/16/87

Date Shipped:

4486830655

Airbill Number:

⑧ Sample Description

☐ Surface Water ☐ Mixed Media☒ Ground Water ☐ Solids☐ Leachate ☐ Other (specify) _____

⑨ Sample Location

GLW-2

MATCHES INORGANIC

SAMPLE MBK 532

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

Organics Analysis Data Sheet
(Page 1)

BK 264

0 0 83

Lab Name: YORK
Sample ID No: 1086002
Sample Matrix: WATER
Data Release Authorized By: [Signature]

Case No: 7495 7459
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6-19-87
Date Analyzed: 6-19-87
Conc/Dil Factor: 1.0 pH N/A
Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	25B
67-64-1	Acetone	25B
75-15-0	Carbon Disulfide	5U
75-35-4	1, 1-Dichloroethene	13
75-34-3	1, 1-Dichloroethane	5U
156-60-5	Trans-1, 2-Dichloroethene	5U
67-66-3	Chloroform	25B
107-06-2	1, 2-Dichloroethane	5U
78-93-3	2-Butanone	10U
71-55-6	1, 1, 1-Trichloroethane	140 5U 3-10B
56-23-5	Carbon Tetrachloride	5U
108-05-4	Vinyl Acetate	10U
75-27-4	Bromodichloromethane	5U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5U
10061-02-6	Trans-1, 3-Dichloropropene	5U
79-01-6	Trichloroethene	0.75B
124-48-1	Dibromochloromethane	5U
79-00-5	1, 1, 2-Trichloroethane	5U
71-43-2	Benzene	25B
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	10U
75-25-2	Bromoform	5U
108-10-1	4-Methyl-2-Pentanone	10U
591-78-6	2-Hexanone	10U
127-18-4	Tetrachloroethene	25B
79-34-5	1, 1, 2, 2-Tetrachloroethane	5U
108-88-3	Toluene	25B
108-90-7	Chlorobenzene	5U
100-41-4	Ethylbenzene	5U
100-42-5	Styrene	5U
	Total Xylenes	5U

3U
7-17-87

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value If the result is a value greater than or equal to the detection limit, report the value
- U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero, (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

- C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the final extract should be confirmed by GC/MS.
- B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Name: York Labs
EPA 7495

Sample Number
BK 264

Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 06-18-87
 Date Analyzed: 07-02-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) N/A

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☒ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/L or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
00-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
9638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
7-72-1	Hexachloroethane	
9-95-3	Nitrobenzene	
78-59-1	Isophorone	
9-75-5	2-Nitrophenol	
95-67-9	2, 4-Dimethylphenol	↓
5-85-0	Benzoic Acid	50u
11-91-1	bis(2-Chloroethoxy)Methane	10u
0-83-2	2, 4-Dichlorophenol	
20-82-1	1, 2, 4-Trichlorobenzene	
1-20-3	Naphthalene	
5-47-8	4-Chloroaniline	
7-68-3	Hexachlorobutadiene	
9-50-7	4-Chloro-3-Methylphenol	
57-6	2-Methylnaphthalene	
147-4	Hexachlorocyclopentadiene	
9-06-2	2, 4, 6-Trichlorophenol	↓
95-4	2, 4, 5-Trichlorophenol	50u
58-7	2-Chloronaphthalene	10u
3-74-4	2-Nitroaniline	50u
-11-3	Dimethyl Phthalate	10u
9-96-8	Acenaphthylene	10u
1-09-2	3-Nitroaniline	50u

CAS Number		ug/L or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7008-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓
100-01-8	4-Nitroaniline	50u
534-82-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-88-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓
97-86-8	Pentachlorophenol	50u
99-01-8	Phenanthrene	10u
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluorenone	
129-00-0	Pyrene	↓
85-68-7	Butylbenzylphthalate	↓
91-84-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-89-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
183-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	↓

(1) - Cannot be separated from diphenylamine

Laboratory Name: York Labs
 Case No. 7495

Sample Number
BK 204

Organics Analysis Data Sheet
 (Page 3)

0091

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)
 Date Extracted/Prepared: 6/19/87
 Date Analyzed: 6/30/87
 Conc/Dil Factor: 1.0
 Percent Moisture (decanted) NA

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☒ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		<u>ug/l</u> or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.5u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.5u
11104-28-2	Aroclor-1221	0.5u
11141-16-5	Aroclor-1232	0.5u
53469-21-9	Aroclor-1242	0.5u
12672-29-6	Aroclor-1248	0.5u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000. or W_s _____ V_i 10,000. V_t 4.0 2.0
 (11/16/87)

Name: YORK LABORATORIES
7495

Sample Number

BK 264Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	<u>NONE DETECTED</u>	<u>VOA</u>		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

York Laboratories
EPA 7495

Sample Number

BK 264

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/L or ug/kg)
1.				
2.				
3.				
4.				
6.				
6.				
7.				
8.				
9.				
10.				
11.	ALDOL COND. PROD.	BNA	8.10	31
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				
35.				
36.				
37.				
38.				
39.				
40.				
41.				
42.				
43.				
44.				
45.				
46.				
47.				
48.				
49.				
50.				
51.				
52.				
53.				
54.				
55.				
56.				
57.				
58.				
59.				
60.				
61.				
62.				
63.				
64.				
65.				
66.				
67.				
68.				
69.				
70.				
71.				
72.				
73.				
74.				
75.				
76.				
77.				
78.				
79.				
80.				
81.				
82.				
83.				
84.				
85.				
86.				
87.				
88.				
89.				
90.				
91.				
92.				
93.				
94.				
95.				
96.				
97.				
98.				
99.				
100.				

BK 271

ORGANICS TRAFFIC REPORT

① Case Number: <u>7459</u> Sample Site Name/Code: 	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment	④ Ship To: York Laboratories 200 Monroe Turnpike Monroe, CT 06468 Attn: <u>John Culick</u> Transfer _____ Ship To: _____																																				
⑤ Regional Office: <u>FT2</u> Sampling Personnel: <u>Randy Rice</u> (Name) <u>(201) 225-6160</u> (Phone) Sampling Date: <u>6/16/87</u> <u>6/16/87</u> (Begin) (End)	⑥ For each sample collected specify number of containers used and mark volume level on each bottle. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 20%;">Number of Containers</th> <th style="width: 20%;">Approximate Total Volume</th> <th style="width: 30%;"></th> </tr> </thead> <tbody> <tr> <td>Water (Extractable)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">240 ml.</td> <td>OK - no Taps</td> </tr> <tr> <td>Water (VOA)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">80 ml.</td> <td>OK - no Taps</td> </tr> <tr> <td>Soil/Sediment (Extractable)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Soil/Sediment (VOA)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td style="text-align: center;">+ (KR)</td> <td style="text-align: center;">+ (KR)</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Number of Containers	Approximate Total Volume		Water (Extractable)	3	240 ml.	OK - no Taps	Water (VOA)	2	80 ml.	OK - no Taps	Soil/Sediment (Extractable)				Soil/Sediment (VOA)				Other	+ (KR)	+ (KR)													
	Number of Containers	Approximate Total Volume																																				
Water (Extractable)	3	240 ml.	OK - no Taps																																			
Water (VOA)	2	80 ml.	OK - no Taps																																			
Soil/Sediment (Extractable)																																						
Soil/Sediment (VOA)																																						
Other	+ (KR)	+ (KR)																																				
⑦ Shipping Information <u>Federal Express</u> Name of Carrier <u>6/16/87</u> Date Shipped: <u>4486830655</u> Airbill Number:	⑧ Analysis Lab: Rec'd by: <u>JP Sample</u> Date Rec'd: <u>6/17/87</u> Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)																																					
⑧ Sample Description <input type="checkbox"/> Surface Water <input type="checkbox"/> Mixed Media <input type="checkbox"/> Ground Water <input type="checkbox"/> Solids <input type="checkbox"/> Leachate <input checked="" type="checkbox"/> Other (specify) <u>TRIP BLANK</u>		⑨ Sample Location <u>MATCHES INORGANIC</u> <u>SAMPLE MBK 539</u>																																				
⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)																																						

Organics Analysis Data Sheet (Page 1)

Sample Number
BK 271

Laboratory Name: York Laboratories
Lab Sample ID No: 1086 008
Sample Matrix: WATER
Data Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 6-18-87

Date Analyzed: 6-18-87

Conc/Dil Factor: 1.0 pH N/A

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	5u
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Name: York Labs
 EPA 7495

Sample Number
BK271

0.060

Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 06-18-87
 Date Analyzed: 07-02-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) N/A

GPC Cleanup ☐ Yes ☒ No

Separatory Funnel Extraction ☒ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	✓✓
65-85-0	Benzoic Acid	50u
111-91-1	bis(2-Chloroethoxy)Methane	10u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
28-06-2	2, 4, 6-Trichlorophenol	✓✓
5-95-4	2, 4, 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
31-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	10u
608-20-2	2, 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7008-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-82-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-88-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-8	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate	10u
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	10u
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	10u
53-70-3	Dibenz(a, h)Anthracene	10u
191-24-2	Benzo(g, h, i)Perylene	10u

(1)- Cannot be separated from diphenylamine

Laboratory Name: York Labs
Case No: 7495

0 0608
Sample Number
BK271

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/19/87
Date Analyzed: 6/30/87
Conc/Dil Factor: 1.0
Percent Moisture (decanted) NA

GPC Cleanup ☐ Yes ☒ No
Separatory Funnel Extraction ☒ Yes
Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		<u>ug/l</u> or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.5u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.5u
11104-28-2	Aroclor-1221	0.5u
11141-16-5	Aroclor-1232	0.5u
53469-21-9	Aroclor-1242	0.5u
12672-29-6	Aroclor-1248	0.5u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000. or W_s _____ V_i 10,000. V_t 4.0 2.0
7/16/87

Buy Name: YORK LABORATORIES

S No: 7495

Sample Number
BK 271

0 0609

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	<i>NONE DETECTED</i>	<i>V6A</i>		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Name: York Laboratories
EPA 7495

Sample Number 0610
BK 271

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
6.				
6.				
7.				
8.				
9.				
10.				
11.	ALDOL COND. PROD.	BNA	8.09	29
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ORGANICS TRAFFIC REPORT

① Case Number: <u>7459</u> Sample Site Name/Code: 	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment	④ Ship To: <u>0 0733</u> <u>York Laboratories</u> <u>200 Monroe Tpk.</u> <u>Monroe, CT 06468</u> Attn: <u>John Culick</u> Transfer Ship To:																											
⑤ Regional Office: <u>FIT 2</u> Sampling Personnel: <u>ANDY RICE</u> (Name) <u>(201) 225-6160</u> (Phone) Sampling Date: <u>6/16/87</u> (Begin) (End)	⑥ For each sample collected specify number of containers used and mark volume level on each bottle. <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Number of Containers</th> <th style="text-align: center;">Approximate Total Volume</th> </tr> </thead> <tbody> <tr> <td>Water (Extractable)</td> <td style="text-align: center;">3</td> <td style="text-align: center;">240 oz.</td> </tr> <tr> <td>Water (VOA)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">80 ml.</td> </tr> <tr> <td>Soil/Sediment (Extractable)</td> <td></td> <td></td> </tr> <tr> <td>Soil/Sediment (VOA)</td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Number of Containers	Approximate Total Volume	Water (Extractable)	3	240 oz.	Water (VOA)	2	80 ml.	Soil/Sediment (Extractable)			Soil/Sediment (VOA)			Other											
	Number of Containers	Approximate Total Volume																											
Water (Extractable)	3	240 oz.																											
Water (VOA)	2	80 ml.																											
Soil/Sediment (Extractable)																													
Soil/Sediment (VOA)																													
Other																													
⑦ Shipping Information <u>Federal Express</u> Name of Carrier <u>6/16/87</u> Date Shipped: <u>4486830655</u> Airbill Number:	⑧ Analysis Lab: Rec'd by: _____ Date Rec'd: _____ Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.) <u>OK - no tags</u> <u>OK - no tags</u> <u>1 has air</u>																												
⑧ Sample Description <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/> Mixed Media <input type="checkbox"/> Ground Water <input type="checkbox"/> Solids <input type="checkbox"/> Leachate <input type="checkbox"/> Other (specify) _____		⑨ Sample Location <u>SV-1</u> <u>MATCHES INORGANIC</u> <u>SAMPLE MBK SLL</u>																											
⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)																													

Organics Analysis Data Sheet
(Page 1)

Sample Number

BK 273

0 0734

Laboratory Name: York Laboratories

Case No: 7495

Lab Sample ID No: 1086010

QC Report No: _____

Sample Matrix: WATER

Contract No: 68-01-7157

Data Release Authorized By: [Signature]

Date Sample Received: 6-17-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 6-18-87

Date Analyzed: 6-18-87

Conc/Dil Factor: 1.0 pH N/A

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	5u
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethane	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethane	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum ascertainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Name: York Labs

EPA 7495

Sample Number

0735

BK273

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted / Prepared: 06-18-87
 Date Analyzed: 07-02-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) N/A

GPC Cleanup ☐ Yes ☒ NoSeparatory Funnel Extraction ☒ YesContinuous Liquid - Liquid Extraction ☐ YesCAS
Numberug/l or ug/Kg
(Circle One)

108-95-2	Phenol	10u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
805-67-9	2, 4-Dimethylphenol	✓✓
65-85-0	Benzoic Acid	50u
11-91-1	bis(2-Chloroethoxy)Methane	10u
20-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
1-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	✓✓
5-95-4	2, 4, 5-Trichlorophenol	50u
71-58-7	2-Chloronaphthalene	10u
98-74-4	2-Nitroaniline	50u
91-11-3	Dimethyl Phthalate	10u
108-96-8	Acenaphthylene	10u
19-09-2	3-Nitroaniline	50u

CAS
Numberug/l or ug/Kg
(Circle One)

83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7008-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	✓✓
100-01-6	4-Nitroaniline	50u
534-82-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-88-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	✓✓
87-86-8	Pentachlorophenol	50u
89-01-8	Phenanthrene	10u
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	✓✓
91-84-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	F
191-24-2	Benzo(g, h, i)Perylene	✓✓

(1) Cannot be separated from diphenylamine

Laboratory Name: York Labs
Case No: 7495

Sample Number
BK 273
0756

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6/19/87
Date Analyzed: 6/30/87
Conc/Dil Factor: 1.0
Percent Moisture (decanted) NA

GPC Cleanup ☐ Yes ☒ No
Separatory Funnel Extraction ☒ Yes
Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.5u
8001-35-2	Toxaphene	1.0u
12674-11-2	Aroclor-1016	0.5u
11104-28-2	Aroclor-1221	0.5u
11141-16-5	Aroclor-1232	0.5u
53469-21-9	Aroclor-1242	0.5u
12672-29-6	Aroclor-1248	0.5u
11097-69-1	Aroclor-1254	1.0u
11096-82-5	Aroclor-1260	1.0u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000. or W_s _____ V_t 10,000. V_i 4.0 2.0
(17/20)
7/16/87

Lab Name: YORK LABORATORIES
No: 7495

Sample Number
BK 273

0 0737 -

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

York Laboratories

EPA 7495

Sample Number

BK 273

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123911	14-DIOXANE	BNA	5.05	12
12.		BNA	7.42	18
13.	ALDOL COND PRODUCT	BNA	8.09	34
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				



ORGANICS TRAFFIC REPORT

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☐ Water
☒ Soil/Sediment

④ Ship To:

0 0513

York Laboratories
266 Marine Turnpike
Meriden, CT 06468

Attn: John Culick

Transfer

Ship To:

⑤ Regional Office: FIT 2

Sampling Personnel:

Randy Rice

(Name)

(203) 225-6160

(Phone)

Sampling Date:

6/16/87

(Begin)

6/16/87

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

Number of Containers

Approximate Total Volume

Water (Extractable)

Water (VOA)

Soil/Sediment (Extractable)

Soil/Sediment (VOA)

Other

2

16 oz.

OK - no Toys

1

170 ml.

OK - no Toys

⑦ Shipping Information

Federal Express

Name of Carrier

6/16/87

Date Shipped:

448683 01655

Airbill Number:

⑧ Sample Description

☐ Surface Water☐ Mixed Media☐ Ground Water☒ Solids☐ Leachate☒ Other (specify) Sample to spike MS/MSD

⑨ Sample Location

3-1
MATCHES INORGANIC
SAMPLE MBK 538

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

Organics Analysis Data Sheet (Page 1)

Sample Number

BK 2700 0514

Laboratory Name: York Laboratories

Case No: 7495

Lab Sample ID No: 1086007

QC Report No: _____

Sample Matrix: SOIL

Contract No: 68-01-7157

Data Release Authorized By: [Signature]

Date Sample Received: 6.17.87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 6.23.87

Date Analyzed: 6.23.87

Conc/Dil Factor: 1.0 pH 7.70

Percent Moisture: (Not Decanted) 8%

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5u
67-64-1	Acetone	5u
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethane	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10U). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ame: York Labs
EPA 7495

0 0515

Sample Number

BK270

Organics Analysis Data Sheet

(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 06-22-87
 Date Analyzed: 07-03-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) 4%

GPC Cleanup ☐ Yes ☒ No

Separatory Funnel Extraction ☐ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number ug/l or ug/Kg (Circle One)

108-95-2	Phenol	330u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓ ↓
65-85-0	Benzoic Acid	1600u
111-91-1	bis(2-Chloroethoxy)Methane	330u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	↓ ↓
88-06-2	2, 4, 6-Trichlorophenol	↓ ↓
95-95-4	2, 4, 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	510
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number ug/l or ug/Kg (Circle One)

83-32-9	Acenaphthene	330u
51-28-5	2, 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2, 4-Dinitrotoluene	
808-20-2	2, 6-Dinitrotoluene	↓ ↓
84-68-2	Diethylphthalate	155
7008-72-3	4-Chlorophenyl-phenylether	330u
86-73-7	Fluorene	330u
100-01-8	4-Nitroaniline	1600u
534-92-1	4, 6-Dinitro-2-Methylphenol	1600u
86-30-6	N-Nitrosodiphenylamine (1)	330u
101-88-3	4-Bromophenyl-phenylether	↓ ↓
118-74-1	Hexachlorobenzene	↓ ↓
87-86-8	Pentachlorophenol	1600u
89-01-8	Phenanthrene	185
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	2000
206-44-0	Fluoranthene	575
129-00-0	Pyrene	485
85-68-7	Butylbenzylphthalate	2100
91-94-1	3, 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	660u
117-81-7	bis(2-Ethoxy)Phthalate	790
218-01-9	Chrysene	475
117-84-0	Di-n-Octyl Phthalate	135
205-99-2	Benzo(b)Fluoranthene	330u
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	=
191-24-2	Benzo(g, h, i)Perylene	↓ ↓

(1)-Cannot be separated from diphenylamine

Acry Name: York Labs
7495
No: _____

Sample Number
BK-270

Organics Analysis Data Sheet
(Page 3)

0 0516

Pesticide/PCBs

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6/22/87
Date Analyzed: 6/30/87
Conc/Dil Factor: 1.0
Percent Moisture (decanted) 8.88

GPC Cleanup ☐ Yes ☒ No
Separatory Funnel Extraction ☐ Yes
Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	8.0u
319-85-7	Beta-BHC	8.0u
319-86-8	Delta-BHC	8.0u
58-89-9	Gamma-BHC (Lindane)	8.0u
76-44-8	Heptachlor	8.0u
309-00-2	Aldrin	8.0u
1024-57-3	Heptachlor Epoxide	8.0u
959-98-8	Endosulfan I	8.0u
60-57-1	Dieldrin	16.4
72-55-9	4, 4'-DDE	18.
72-20-8	Endrin	16.4
33213-65-9	Endosulfan II	16.4
72-54-8	4, 4'-DDD	16.4
1031-07-8	Endosulfan Sulfate	16.4
50-29-3	4, 4'-DDT	16.4
72-43-5	Methoxychlor	80.4
53494-70-5	Endrin Ketone	16.4
57-74-9	Chlordane	80.4
8001-35-2	Toxaphene	160.4
12674-11-2	Aroclor-1016	80.4
11104-28-2	Aroclor-1221	80.4
11141-16-5	Aroclor-1232	80.4
53469-21-9	Aroclor-1242	80.4
12672-29-6	Aroclor-1248	80.4
11097-69-1	Aroclor-1254	160.4
11096-82-5	Aroclor-1260	1000.

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.01 V_t 20,000 V_i 2.0

dry Name: YORK LABORATORIES

No: 7495

Sample Number
BK 270

0-0517

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. N/A	NONE DETECTED	VOA	N/A	N/A
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Astory Name: York Labs
 Base No: EPA 7495

Organics Analysis Data Sheet
 (Page 4)

Sample Number

BK270

0 0518

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.	1			
11.	UNKNOWN ALKENE/CYCLOALKANE	BNA	7.15	210
12.	ALDOL COND. PROD.		7.55	3900
13.	ALDOL COND. PROD.		8.21	40000
14.	11023 5-METHYL-2-HEXANONE		8.44	820
15.	UNKNOWN, C9-ALKANE		8.54	1100
16.	UNKNOWN, C9-ALKANE		8.71	2700
17.	UNKNOWN, ALDOL COND. PROD. ALDOL		9.68	880
18.	UNKNOWN, ALKANE		9.95	250
19.	UNKNOWN, ALKENE/CYCLOALKANE		10.30	670
20.	UNKNOWN, ALKANE		11.14	480
21.	UNKNOWN, SULFUR COMPOUND		23.49	446
22.	UNKNOWN, SULFUR COMPOUND		24.52	880
23.	UNKNOWN, ALKANE		33.27	660
24.	UNKNOWN, ALKANE	✓	35.58	600
25.	TETRACHLOROBIPHENYL ISOMER		26.41	56
26.	PENTACHLOROBIPHENYL ISOMER		26.51	91
27.	HEXACHLOROBIPHENYL ISOMER		28.24	46
28.				2
29.				
30.				



ORGANICS TRAFFIC REPORT

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☐ Water
☒ Soil/Sediment

④ Ship To:

0 0416
York Laboratories
200 Monroe Turnpike
Monroe, CT 06468

Attn: John Culick

Transfer

Ship To:

⑤ Regional Office: FIT 2

Sampling Personnel:

Randy Rice

(Name)

(201) 225-6160

(Phone)

Sampling Date:

6/16/87 6/16/87

(Begin)

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)	2	110 mL
Soil/Sediment (VOA)	1	120 mL
Other		

⑦ Shipping Information

Federal Express

Name of Carrier

6/16/87

Date Shipped:

448683 0655

Airbill Number:

⑪ Analysis Lab:

Rec'd by: [Signature]

Date Rec'd: 6/11/87

Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑧ Sample Description

☐ Surface Water ☐ Mixed Media
☐ Ground Water ☒ Solids
☐ Leachate ☐ Other (specify) _____

⑨ Sample Location

S-2

MATCHES INORGANIC
SAMPLE MBK 537

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

Organics Analysis Data Sheet
(Page 1)

Sample Number

BK 269

0-0417

Laboratory Name: YORK LABORATORIES

Case No: 7495

Lab Sample ID No: IDB6006

QC Report No: _____

Sample Matrix: SOIL

Contract No: 68-DI-7157

Data Release Authorized By: [Signature]

Date Sample Received: 6/17/87

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 6-23-87

Date Analyzed: 6-23-87

Conc/Dil Factor: 1.0 pH 7.55

Percent Moisture: (Not Decanted) 7.8%

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10U
74-83-9	Bromomethane	10U
75-01-4	Vinyl Chloride	10U
75-00-3	Chloroethane	10U
75-09-2	Methylene Chloride	3B
67-64-1	Acetone	2B
75-15-0	Carbon Disulfide	5U
75-35-4	1, 1-Dichloroethene	85
75-34-3	1, 1-Dichloroethane	5U
156-60-5	Trans-1, 2-Dichloroethene	5U
67-66-3	Chloroform	4B
107-06-2	1, 2-Dichloroethane	5U
78-93-3	2-Butanone	10U
71-55-6	1, 1, 1-Trichloroethane	0.7J
56-23-5	Carbon Tetrachloride	5U
108-05-4	Vinyl Acetate	10U
75-27-4	Bromodichloromethane	5U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5U
10061-02-6	Trans-1, 3-Dichloropropene	5U
79-01-6	Trichloroethene	1J
124-48-1	Dibromochloromethane	5U
79-00-5	1, 1, 2-Trichloroethane	5U
71-43-2	Benzene	0.4B
10061-01-5	cis-1, 3-Dichloropropene	5U
110-75-8	2-Chloroethylvinylether	10U
75-25-2	Bromoform	5U
108-10-1	4-Methyl-2-Pentanone	10U
591-78-6	2-Hexanone	10U
127-18-4	Tetrachloroethene	5U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5U
108-88-3	Toluene	7
108-90-7	Chlorobenzene	5U
100-41-4	Ethylbenzene	5U
100-42-5	Styrene	5U
	Total Xylenes	3JB

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value.
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ul in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Lab Name: York Labs
No: EPA 7495

Sample Number 0418
BK 269

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 06-22-87
Date Analyzed: 07-03-87
Conc/Dil Factor: 1.0
Percent Moisture (Decanted) 7%

GPC Cleanup ☐ Yes ☒ No
Separatory Funnel Extraction ☐ Yes
Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	330U
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
21-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
88-95-3	Nitrobenzene	
88-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓ ↓
5-85-0	Benzoic Acid	1600U
111-91-1	bis(2-Chloroethoxy)Methane	330U
120-83-2	2, 4-Dichlorophenol	↓ ↓
120-82-1	1, 2, 4-Trichlorobenzene	↓ ↓
91-20-3	Naphthalene	30J
106-47-8	4-Chloroaniline	330U
7-68-3	Hexachlorobutadiene	↓ ↓
59-50-7	4-Chloro-3-Methylphenol	↓ ↓
91-57-6	2-Methylnaphthalene	67J
7-47-4	Hexachlorocyclopentadiene	330U
88-06-2	2, 4, 6-Trichlorophenol	330U
95-95-4	2, 4, 5-Trichlorophenol	1600U
1-58-7	2-Chloronaphthalene	330U
8-74-4	2-Nitroaniline	1600U
131-11-3	Dimethyl Phthalate	330U
98-96-8	Acenaphthylene	330U
9-09-2	3-Nitroaniline	1600U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330U
51-28-5	2, 4-Dinitrophenol	1600U
100-02-7	4-Nitrophenol	1600U
132-64-9	Dibenzofuran	330U
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7008-72-3	4-Chlorophenyl-phenylether	
84-73-7	Fluorene	↓ ↓
100-01-6	4-Nitroaniline	1600U
534-92-1	4, 6-Dinitro-2-Methylphenol	1600U
86-30-6	(N-Nitrosodiphenylamine (1)	330U
101-88-3	4-Bromophenyl-phenylether	↓ ↓
118-74-1	Hexachlorobenzene	↓ ↓
87-86-8	Pentachlorophenol	1600U
89-01-8	Phenanthrene	27J
120-12-7	Anthracene	330U
84-74-2	Di-n-Butylphthalate	80J
206-44-0	Fluoranthene	55J
129-00-0	Pyrene	57J
85-68-7	Butylbenzylphthalate	200J
91-84-1	3, 3'-Dichlorobenzidine	660U
56-55-3	Benzo(a)Anthracene	42J
117-81-7	bis(2-Ethylhexyl)Phthalate	5900
218-01-9	Chrysene	54J
117-84-0	Di-n-Octyl Phthalate	330U
205-99-2	Benzo(b)Fluoranthene	71J
207-08-9	Benzo(k)Fluoranthene	60J
50-32-8	Benzo(a)Pyrene	330U
183-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	↓ ↓

(1) Cannot be separated from diphenylamine

Laboratory Name: York Labs
Case No: 7495

Sample Number

BK 269

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

GPC Cleanup ☐ Yes ☒ No

Date Extracted/Prepared: 6/22/87

Separatory Funnel Extraction ☐ Yes

Date Analyzed: 6/30/87

Continuous Liquid - Liquid Extraction ☐ Yes

Conc/Dil Factor: 1.0

Percent Moisture (decanted) 14.99

CAS Number ug/l or ug/Kg
(Circle One)

319-84-6	Alpha-BHC	8.04
319-85-7	Beta-BHC	8.04
319-86-8	Delta-BHC	8.04
58-89-9	Gamma-BHC (Lindane)	8.04
76-44-8	Heptachlor	8.04
309-00-2	Aldrin	8.04
1024-57-3	Heptachlor Epoxide	8.04
959-98-8	Endosulfan I	8.04
60-57-1	Dieldrin	16.4
72-55-9	4, 4'-DDE	16.4
72-20-8	Endrin	16.4
33213-65-9	Endosulfan II	16.4
72-54-8	4, 4'-DDD	16.4
1031-07-8	Endosulfan Sulfate	16.4
50-29-3	4, 4'-DDT	16.4
72-43-5	Methoxychlor	80.4
53494-70-5	Endrin Ketone	16.4
57-74-9	Chlordane	80.4
8001-35-2	Toxaphene	160.4
12674-11-2	Aroclor-1016	80.4
11104-28-2	Aroclor-1221	80.4
11141-16-5	Aroclor-1232	80.4
53469-21-9	Aroclor-1242	80.4
12672-29-6	Aroclor-1248	80.4
11097-69-1	Aroclor-1254	160.4
11096-82-5	Aroclor-1260	3900.

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.01 V_i 20.000 V_t 2.0

Laboratory Name: YORK LABORATORIES
Case No: 7495

Sample Number

BK 269

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. N/A	NONE DETECTED	VOA	N/A	N/A
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name: York Labs
Case No: EPA 7495

Sample Number

BK 269

Organics Analysis Data Sheet
(Page 4)

0 0421

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	(RT) or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.	UNKNOWN, ALKENE/CYCLOALKANE	BNA	7.17	250
11.	ALDOL COND. PROD.		7.58	4600
12.	ALDOL COND. PROD.		8.23	46000
13.	UNKNOWN, C9-ALKANE		8.39	240
14.	UNKNOWN, ALKANE		8.45	440
15.	UNKNOWN, C9-ALKANE		8.56	1200
16.	UNKNOWN, ALKANE		8.73	4400
17.	UNKNOWN, ALKANE		9.27	540 (B)
18.	UNKNOWN ALKANE		9.69	1000
19.	UNKNOWN, ALKENE/CYCLOALKANE		10.30	980
20.	UNKNOWN, ALKANE		11.15	310
21.			60.50	300 (D)
22.		✓	30.31	660
23.	HEXACHLOROBIPHENYL ISOMER		28.25	47
24.	HEXACHLOROBIPHENYL ISOMER		28.70	46
25.	HEXACHLOROBIPHENYL ISOMER		29.30	35
26.	HEXACHLOROBIPHENYL ISOMER		29.62	41
27.	OCTACHLOROBIPHENYL ISOMER	✓	31.48	42
28.				
29.				
30.				



ORGANICS TRAFFIC REPORT

① Case Number: <u>7459</u>		② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration		④ Ship To: <u>0 0143</u> <u>York Laboratories</u> <u>200 Monroe Turnpike</u> <u>Monroe, CT. 06468</u> Attn: <u>John Culick</u> Transfer Ship To:																												
Sample Site Name/Code: 		③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment																														
⑤ Regional Office: <u>EIT 2</u> Sampling Personnel: <u>Randy Rice</u> (Name) <u>(201) 225-1660</u> (Phone) Sampling Date: <u>6/16/87 - 10/16/87</u> (Begin) (End)		⑥ For each sample collected specify number of containers used and mark volume level on each bottle. <table border="1"><thead><tr><th></th><th>Number of Containers</th><th>Approximate Total Volume</th></tr></thead><tbody><tr><td>Water (Extractable)</td><td></td><td></td></tr><tr><td>Water (VOA)</td><td></td><td></td></tr><tr><td>Soil/Sediment (Extractable)</td><td><u>2</u></td><td><u>16 CT.</u></td></tr><tr><td>Soil/Sediment (VOA)</td><td><u>1</u></td><td><u>120 ml.</u></td></tr><tr><td>Other</td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>			Number of Containers	Approximate Total Volume	Water (Extractable)			Water (VOA)			Soil/Sediment (Extractable)	<u>2</u>	<u>16 CT.</u>	Soil/Sediment (VOA)	<u>1</u>	<u>120 ml.</u>	Other												⑪ Analysis Lab: Rec'd by: _____ Date Rec'd: _____ Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.) <u>OK - no tags</u> <u>OK - no tags</u>	
	Number of Containers	Approximate Total Volume																														
Water (Extractable)																																
Water (VOA)																																
Soil/Sediment (Extractable)	<u>2</u>	<u>16 CT.</u>																														
Soil/Sediment (VOA)	<u>1</u>	<u>120 ml.</u>																														
Other																																
⑦ Shipping Information <u>Federal Express</u> Name of Carrier <u>6/16/87</u> Date Shipped: <u>4486830655</u> Airbill Number:																																
⑧ Sample Description <input type="checkbox"/> Surface Water <input type="checkbox"/> Mixed Media <input type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Solids <input type="checkbox"/> Leachate <input type="checkbox"/> Other (specify) _____			⑨ Sample Location <u>S-3</u> <u>MATHE'S INORGANIC</u> <u>SAMPLE # 533</u>																													
⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)																																

LAB FILE COPY

Organics Analysis Data Sheet
(Page 1)

BK265

0 0144

Agency Name: YORK
Sample ID No: 1086003
Sample Matrix: Soil
Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6-22-87
Date Analyzed: 6-22-87
Conc/Dil Factor: 1.0 pH 6.55
Percent Moisture: (Not Decanted) 18%

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	1
75-01-4	Vinyl Chloride	1
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	NB
67-64-1	Acetone	NB
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethene	2
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethene	5u
67-66-3	Chloroform	NB
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	285
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	15
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	NB
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	NB
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	2+5
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	1
100-42-5	Styrene	1
	Total Xylenes	↓

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ul in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Name: York Labs
 EPA 7495

0 0145
 Sample Number
BK 265

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted / Prepared 6-22-87
 Date Analyzed: 07-06-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) 10%

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☐ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
106-95-2	Phenol	330u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-8	2, 4-Dimethylphenol	↓ ↓
65-85-0	Benzoic Acid	1600u
111-91-1	bis(2-Chloroethoxy)Methane	330u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓ ↓
95-95-4	2, 4, 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2, 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓ ↓
100-01-6	4-Nitroaniline	1600u
534-52-1	4, 6-Dinitro-2-Methylphenol	1600u
86-30-6	N-Nitrosodiphenylamine (1)	330u
101-55-3	4-Bromophenyl-phenylether	↓ ↓
118-74-1	Hexachlorobenzene	↓ ↓
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	43J
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	44J
208-44-0	Fluoranthene	71J
129-00-0	Pyrene	54J
85-88-7	Butylbenzylphthalate	330u
91-94-1	3, 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	43J
117-81-7	bis(2-Ethylhexyl)Phthalate	200J
218-01-9	Chrysene	62J
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)Fluoranthene	41J
207-08-9	Benzo(k)Fluoranthene	48J
50-32-8	Benzo(a)Pyrene	43J 330u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	330u
53-70-3	Dibenz(e, h)Anthracene	↓ ↓
191-24-2	Benzo(g, h, i)Perylene	↓ ↓

(1)-Cannot be separated from diphenylamine

Story Name: York Labs
7495
e No: _____

Sample Number

BK 265

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

GPC Cleanup ☐ Yes ☒ No

Date Extracted/Prepared: 6/22/87

Separatory Funnel Extraction ☐ Yes

Date Analyzed: 6/30/87

Continuous Liquid - Liquid Extraction ☐ Yes

Conc/Dil Factor: 1.0

Percent Moisture (decanted) 20.92

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	8.0u
319-85-7	Beta-BHC	8.0u
319-86-8	Delta-BHC	8.0u
58-89-9	Gamma-BHC (Lindane)	8.0u
76-44-8	Heptachlor	8.0u
309-00-2	Aldrin	8.0u
1024-57-3	Heptachlor Epoxide	8.0u
959-98-8	Endosulfan I	8.0u
60-57-1	Dieldrin	16.0u
72-55-9	4, 4'-DDE	170.
72-20-8	Endrin	16.0u
33213-65-9	Endosulfan II	16.0u
72-54-8	4, 4'-DDD	53.
1031-07-8	Endosulfan Sulfate	16.0u
50-29-3	4, 4'-DDT	210.
72-43-5	Methoxychlor	80.0u
53494-70-5	Endrin Ketone	16.0u
57-74-9	Chlordane	80.0u
8001-35-2	Toxaphene	160.0u
12674-11-2	Aroclor-1016	80.0u
11104-28-2	Aroclor-1221	80.0u
11141-16-5	Aroclor-1232	80.0u
53469-21-9	Aroclor-1242	80.0u
12672-29-6	Aroclor-1248	80.0u
11097-69-1	Aroclor-1254	160.0u
11096-82-5	Aroclor-1260	160.0u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.01 V_i 20.000 V_t 2.0

City Name: YORK LABORATORIES

No: 7495

Sample Number
BK 265

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. <u>N/A</u>	<u>NONE DETECTED</u>	<u>VOA</u>	<u>N/A</u>	<u>N/A</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

City Name: York Lnds
 No: EPA 7495

Sample Number
BK265

Organics Analysis Data Sheet
 (Page 4)

00148

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.	UNKNOWN, ALKENE/CYCLOALKANE	BNA	7.10	206 210
12.	UNKNOWN,		7.48	4900
13.	ALDOL COND. PROD.		8.12	57000
14.	UNKNOWN, ALKANE		8.34	300
15.	UNKNOWN, HYDROCARBON		8.37	320
16.	UNKNOWN, ALKANE		8.50	1200
17.	UNKNOWN, ALKANE		8.67	1700
18.	UNKNOWN, HYDROCARBON		9.63	1100
19.	UNKNOWN, HYDROCARBON		9.91	380
20.	UNKNOWN, HYDROCARBON		10.24	370
21.	UNKNOWN, HYDROCARBON		11.09	370
22. 4425825	9H-FLUORENE, 9-METHYLENE		23.45	520
23.	UNKNOWN		26.52	530
24.	UNKNOWN, ALDEHYDE		29.29	220
25.			30.29	580 (M)
26.	UNKNOWN, ALKANE		33.26	1300
27.	UNKNOWN, ALKANE		35.56	1400
28.	UNKNOWN, HYDROCARBON	✓	39.74	9600
29.				
30.				



ORGANICS TRAFFIC REPORT

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☐ Water
☒ Soil/Sediment

④ Ship To:

U-0238
York Laboratories
200 Monroe Turnpike
Monroe, CT. 06468

Attn: John Culick

Transfer

Ship To:

⑤ Regional Office: EIT 2

Sampling Personnel:

Randy Rice

(Name)

(201) 225-6160

(Phone)

Sampling Date:

6/16/87 6/16/87

(Begin)

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	
Water (Extractable)			
Water (VOA)			
Soil/Sediment (Extractable)	2	16 oz.	OK - No Tags
Soil/Sediment (VOA)	1	120 ml.	OK - No Tags
Other			

⑦ Shipping Information

Federal Express

Name of Carrier

6/16/87

Date Shipped:

4486830655

Airbill Number:

⑧ Sample Description

☐ Surface Water ☐ Mixed Media
☐ Ground Water ☒ Solids
☐ Leachate ☐ Other (specify) _____

⑨ Sample Location

S-4
MATCHES INORGANIC
SAMPLE MBK 534

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

Organics Analysis Data Sheet
(Page 1)

Sample Number
BK 266

0 0239

Laboratory Name: York Laboratories
Lab Sample ID No: 1086004
Sample Matrix: SOIL
Data Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6-23-87
Date Analyzed: 6-23-87
Conc/Dil Factor: 1.0 pH 6.65
Percent Moisture: (Not Decanted) 78%

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	10u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5u
75-35-4	1, 1-Dichloroethane	5u
75-34-3	1, 1-Dichloroethane	5u
156-60-5	Trans-1, 2-Dichloroethane	5u
67-66-3	Chloroform	5u
107-06-2	1, 2-Dichloroethane	5u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5u
56-23-5	Carbon Tetrachloride	5u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5u
10061-02-6	Trans-1, 3-Dichloropropene	5u
79-01-6	Trichloroethene	5u
124-48-1	Dibromochloromethane	5u
79-00-5	1, 1, 2-Trichloroethane	5u
71-43-2	Benzene	5u
10061-01-5	cis-1, 3-Dichloropropene	5u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5u
108-88-3	Toluene	5u
108-90-7	Chlorobenzene	5u
100-41-4	Ethylbenzene	5u
100-42-5	Styrene	5u
	Total Xylenes	5u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/l in the total extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Lab Name: York Labs
 Ao: EPA 7495

Sample Number

BK 266

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared 6-22-87
 Date Analyzed: 07-06-87
 Conc/Dil Factor: 10
 Percent Moisture (Decanted) 31%

GPC Cleanup ☐ Yes ☒ NoSeparatory Funnel Extraction ☐ YesContinuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	3300 u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-8	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-8	2, 4-Dimethylphenol	↓ ↓
65-85-0	Benzoic Acid	16000 u
111-91-1	bis(2-Chloroethoxy)Methane	3300 u
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	↓ ↓
95-95-4	2, 4, 5-Trichlorophenol	16000 u
91-58-7	2-Chloronaphthalene	3300 u
88-74-4	2-Nitroaniline	16000 u
131-11-3	Dimethyl Phthalate	3300 u
208-96-8	Acenaphthylene	3300 u
99-09-2	3-Nitroaniline	16000 u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	3300 u
51-28-5	2, 4-Dinitrophenol	16000 u
100-02-7	4-Nitrophenol	16000 u
132-84-9	Dibenzofuran	3300 u
121-14-2	2, 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	↓ ↓
100-01-6	4-Nitroaniline	16000 u
534-52-1	4, 6-Dinitro-2-Methylphenol	16000 u
86-30-6	N-Nitrosodiphenylamine (1)	3300 u
101-55-3	4-Bromophenyl-phenylether	↓ ↓
118-74-1	Hexachlorobenzene	↓ ↓
87-86-5	Pentachlorophenol	16000 u
85-01-8	Phenanthrene	250 J
120-12-7	Anthracene	3300 u
84-74-2	Di-n-Butylphthalate	1300 J
206-44-0	Fluoranthene	830 J
129-00-0	Pyrene	490 J
85-88-7	Butylbenzylphthalate	240 J
91-84-1	3, 3'-Dichlorobenzidine	1600 u
56-55-3	Benzo(a)Anthracene	260 J
117-81-7	bis(2-Ethylhexyl)Phthalate	44000
218-01-9	Chrysene	480 J
117-84-0	Di-n-Octyl Phthalate	140 J
205-99-2	Benzo(b)Fluoranthene	440 J
207-08-9	Benzo(k)Fluoranthene	3300 u
50-32-8	Benzo(a)Pyrene	280 J
193-39-5	Indeno(1, 2, 3-cd)Pyrene	3300 u
53-70-3	Dibenzo(b, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	↓ ↓

(1) Cannot be separated from diphenylamine

Laboratory Name: York Labs
 Use No: 7495

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 6/22/87
 Date Analyzed: 7/3/87
 Conc/Dil Factor: 20.
 Percent Moisture (decanted) 63.78

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☐ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	120.4
319-85-7	Beta-BHC	120.4
319-86-8	Delta-BHC	120.4
58-89-9	Gamma-BHC (Lindane)	120.4
76-44-8	Heptachlor	120.4
309-00-2	Aldrin	120.4
1024-57-3	Heptachlor Epoxide	120.4
959-98-8	Endosulfan I	120.4
60-57-1	Dieldrin	240.4
72-55-9	4, 4'-DDE	240.4
72-20-8	Endrin	240.4
33213-85-9	Endosulfan II	240.4
72-54-8	4, 4'-DDD	240.4
1031-07-8	Endosulfan Sulfate	240.4
50-29-3	4, 4'-DDT	240.4
72-43-5	Methoxychlor	1200.4
53494-70-5	Endrin Ketone	240.4
57-74-9	Chlordane	1200.4
8001-35-2	Toxaphene	2400.4
12674-11-2	Aroclor-1016	1200.4
11104-28-2	Aroclor-1221	1200.4
11141-16-5	Aroclor-1232	1200.4
53469-21-9	Aroclor-1242	1200.4
12672-29-6	Aroclor-1248	1200.4
11097-69-1	Aroclor-1254	2416,000 (mcpd 7/16)
11096-82-5	Aroclor-1260	2400.4

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.01 V_i 20,000. V_t 2.0

Story Name: YORK LABORATORIESNo: 7495

Sample Number

BK 266

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. N/A	NONE DETECTED	VOA	N/A	N/A
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name: York Labs
Case No: EPA 7495

Sample Number
BK266

Organics Analysis Data Sheet
(Page 4)

0 0243

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.	UNKNOWN	BNA	7.46	16600
11.	ALDOL COND. PROD.		8.03	100000
12.	UNKNOWN, ALKANE		8.67	6100
13.			15.50	2100
14. 100-97-0	1,3,5,7-TETRAAZATRICYCLO[3.3.1.1 ^{4,7}]DECANE		15.56	2500
15. 95-169	BENZOTHIADIAZOLE		16.92	2800
16.	1,3-ISOBENZOFURANDIONE		18.95	3700
17. 103-71-1	ISOCYANATOBENZENE		21.16	7100
18.	UNKNOWN		23.16	10000 (519)
19. 1862073	6-(dimethylamino)-1-hexanol		24.17	2800
20. 1862073	6-(DIMETHYLAMINO)-1-HEXANOL		33.26	8100
21.	UNKNOWN, ALKANE		35.57	5000
22. 629925	NONADECANE	↓		
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				



ORGANICS TRAFFIC REPORT

Sample Number

BK 268

① Case Number:

7459

Sample Site Name/Code:

② SAMPLE CONCENTRATION

(Check One)

☒ Low Concentration
☐ Medium Concentration

③ SAMPLE MATRIX

(Check One)

☐ Water
☒ Soil/Sediment

④ Ship To:

York Laboratories
260 Munroe Tr. Pk.
Munroe, CT 06468

Attn: John Collick

Transfer

Ship To:

⑤ Regional Office: FIT 2

Sampling Personnel:

Randy Rice

(Name)

(201) 225-6110

(Phone)

Sampling Date:

(Begin)

(End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)	2	16 oz.
Soil/Sediment (VOA)	1	120 ml.
Other		

Water (Extractable)

Water (VOA)

Soil/Sediment (Extractable)

Soil/Sediment (VOA)

Other

⑪ Analysis Lab:

Rec'd by: B. BannisterDate Rec'd: 6/15/87

Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑦ Shipping Information

Federal Express

Name of Carrier

6/16/87

Date Shipped:

4486830655

Airbill Number:

⑧ Sample Description

☐ Surface Water ☐ Mixed Media
☐ Ground Water ☒ Solids
☐ Leachate ☐ Other (specify) _____

⑨ Sample Location

SED-1

MATCHES INORGANIC
SAMPLE MBK 536

⑩ Special Handling Instructions:

(e.g., safety precautions, hazardous nature)

LAB FILE COPY

Organics Analysis Data Sheet
(Page 1)

Sample Number
BK268

0 0328

Laboratory Name: YORK
Lab Sample ID No: 1086005
Sample Matrix: SOIL
Data Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-0-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 6-22-87
Date Analyzed: 6-22-87
Conc/Dil Factor: 1-0 pH 8.15
Percent Moisture: (Not Decanted) 3%

CAS Number		ug/l or <u>(ug/Kg)</u> (Circle One)
74-87-3	Chloromethane	<u>10u</u>
74-83-9	Bromomethane	<u>10u</u>
75-01-4	Vinyl Chloride	<u>10u</u>
75-00-3	Chloroethane	<u>10u</u>
75-09-2	Methylene Chloride	<u>10u</u>
67-64-1	Acetone	<u>10u</u>
75-15-0	Carbon Disulfide	<u>5u</u>
75-35-4	1, 1-Dichloroethene	<u>10u</u>
75-34-3	1, 1-Dichloroethane	<u>5u</u>
156-60-5	Trans-1, 2-Dichloroethene	<u>5u</u>
67-66-3	Chloroform	<u>10u</u>
107-06-2	1, 2-Dichloroethane	<u>5u</u>
78-93-3	2-Butanone	<u>10u</u>
71-55-6	1, 1, 1-Trichloroethane	<u>10u</u>
56-23-5	Carbon Tetrachloride	<u>5u</u>
108-05-4	Vinyl Acetate	<u>10u</u>
75-27-4	Bromodichloromethane	<u>5u</u>

CAS Number		ug/l or <u>(ug/Kg)</u> (Circle One)
78-87-5	1, 2-Dichloropropane	<u>5u</u>
10061-02-6	Trans-1, 3-Dichloropropene	<u>10u</u>
79-01-6	Trichloroethene	<u>10u</u>
124-48-1	Dibromochloromethane	<u>10u</u>
79-00-5	1, 1, 2-Trichloroethane	<u>10u</u>
71-43-2	Benzene	<u>10u</u>
10061-01-5	cis-1, 3-Dichloropropene	<u>5u</u>
110-75-8	2-Chloroethylvinylether	<u>10u</u>
75-25-2	Bromoform	<u>5u</u>
108-10-1	4-Methyl-2-Pentanone	<u>10u</u>
591-78-6	2-Hexanone	<u>10u</u>
127-18-4	Tetrachloroethene	<u>5u</u>
79-34-5	1, 1, 2, 2-Tetrachloroethane	<u>10u</u>
108-88-3	Toluene	<u>10u</u>
108-90-7	Chlorobenzene	<u>10u</u>
100-41-4	Ethylbenzene	<u>10u</u>
100-42-5	Styrene	<u>10u</u>
	Total Xylenes	<u>10u</u>

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample
- J** Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

- C** This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ul in the final extract should be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- Other** Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Lab Name: York Labs
 ID: EPA 7495

Sample Number
BK368

Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
 Date Extracted/Prepared: 6-22-87
 Date Analyzed: 07-03-87
 Conc/Dil Factor: 1.0
 Percent Moisture (Decanted) 2%

GPC Cleanup ☐ Yes ☒ No
 Separatory Funnel Extraction ☐ Yes
 Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	330u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
5-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
21-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
8-59-1	Isophorone	
68-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	↓ ↓
6-85-0	Benzoic Acid	1600u
1-91-1	bis(2-Chloroethoxy)Methane	330u
20-83-2	2, 4-Dichlorophenol	
0-82-1	1, 2, 4-Trichlorobenzene	
1-20-3	Naphthalene	
06-47-8	4-Chloroaniline	
68-3	Hexachlorobutadiene	
50-7	4-Chloro-3-Methylphenol	
11-57-6	2-Methylnaphthalene	
7-47-4	Hexachlorocyclopentadiene	
06-2	2, 4, 6-Trichlorophenol	↓ ↓
5-85-4	2, 4, 5-Trichlorophenol	1600u
58-7	2-Chloronaphthalene	330u
74-4	2-Nitroaniline	1600u
31-11-3	Dimethyl Phthalate	330u
28-96-8	Acenaphthylene	330u
09-2	3-Nitroaniline	1600u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2, 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600u
132-64-9	Dibenzofuran	330u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7003-72-3	4-Chlorophenyl-phenylether	
80-73-7	Fluorene	↓ ↓
100-01-6	4-Nitroaniline	1600u
534-52-1	4, 6-Dinitro-2-Methylphenol	1600u
86-30-6	N-Nitrosodiphenylamine (1)	330u
101-88-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	↓ ↓
87-86-8	Pentachlorophenol	1600u
89-01-8	Phenanthrene	330u
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	71J
206-44-0	Fluoranthene	27J
129-00-0	Pyrene	24J
85-68-7	Butylbenzylphthalate	49J
91-94-1	3, 3'-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethoxy)Phthalate	280
218-01-9	Chrysene	330u
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	=
181-24-2	Benzo(g, h, i)Perylene	↓ ↓

(1) Cannot be separated from diphenylamine

9/25
 7-85

Laboratory Name: York Labs
Case No: 7495

Sample Number
BK 268

Organics Analysis Data Sheet
(Page 3)

0 0330

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

GPC Cleanup ☐ Yes ☒ No

Date Extracted/Prepared: 6/22/87

Separatory Funnel Extraction ☐ Yes

Date Analyzed: 6/30/87

Continuous Liquid - Liquid Extraction ☐ Yes

Conc/Dil Factor: 1.0

Percent Moisture (decanted) 3.59

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	8.0u
319-85-7	Beta-BHC	8.0u
319-86-8	Delta-BHC	8.0u
58-89-9	Gamma-BHC (Lindane)	8.0u
76-44-8	Heptachlor	8.0u
309-00-2	Aldrin	8.0u
1024-57-3	Heptachlor Epoxide	8.0u
959-98-8	Endosulfan I	8.0u
60-57-1	Dieldrin	16.4
72-55-9	4, 4'-DDE	4.75
72-20-8	Endrin	16.4
33213-65-9	Endosulfan II	16.4
72-54-8	4, 4'-DDD	16.4
1031-07-8	Endosulfan Sulfate	16.4
50-29-3	4, 4'-DDT	16.4
72-43-5	Methoxychlor	80.4
53494-70-5	Endrin Ketone	16.4
57-74-9	Chlordane	80.4
8001-35-2	Toxaphene	160.4
12674-11-2	Aroclor-1016	80.4
11104-28-2	Aroclor-1221	80.4
11141-16-5	Aroclor-1232	80.4
53469-21-9	Aroclor-1242	80.4
12672-29-6	Aroclor-1248	80.4
11097-69-1	Aroclor-1254	170.
11096-82-5	Aroclor-1260	160.4

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.01 V_t 20,000 V_i 2.0

Story Name: YORK LABORATORIES
As No: 7495

Sample Number

BK 268

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. N/A	NONE DETECTED	VOA	N/A	N/A
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Organics Analysis Data Sheet

(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	R _T or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.	UNKNOWN, C8-ALKENE/CYCLOALKANE	BNA	7.10	170
12.	UNKNOWN, C8-ALKENE/CYCLOALKANE		7.17	270
	UNKNOWN		7.58	5000
	ALDOL COND. PROD.		8.23	50000
5.	UNKNOWN, ALKANE		(X) 8.4539	260
	UNKNOWN, C9-ALKANE		8.45	350
7.	UNKNOWN, C9-ALKANE		8.55	1300
8.	UNKNOWN, C9-ALKANE		8.71	1860
	UNKNOWN, HYDROCARBON		9.68	1200
0.	UNKNOWN, C9-ALKANE		9.95	180
	UNKNOWN, HYDROCARBON		10.29	540
	UNKNOWN, HYDROCARBON		11.11	160
3.	UNKNOWN, C8-ALKANE		11.14	470
	UNKNOWN, ALKANE		33.27	390
	UNKNOWN, ALKANE	V	35.57	600
5.				



ORGANICS TRAFFIC REPORT

① Case Number: 7459		② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration		④ Ship To: 0 0657 York Laboratories 200 Monroe Tpk. Monroe, CT 06468 Attn: John Culick Transfer Ship To:																												
Sample Site Name/Code: 		③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment																														
⑤ Regional Office: FIT2 Sampling Personnel: RANDY RICE (Name) (201) 548-4149 (Phone) Sampling Date: 6/16/87 6/16/87 (Begin) (End)		⑥ For each sample collected specify number of containers used and mark volume level on each bottle. <table border="1"><thead><tr><th></th><th>Number of Containers</th><th>Approximate Total Volume</th></tr></thead><tbody><tr><td>Water (Extractable)</td><td></td><td></td></tr><tr><td>Water (VOA)</td><td></td><td></td></tr><tr><td>Soil/Sediment (Extractable)</td><td>2</td><td>1607.</td></tr><tr><td>Soil/Sediment (VOA)</td><td>1</td><td>120 ml.</td></tr><tr><td>Other</td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>			Number of Containers	Approximate Total Volume	Water (Extractable)			Water (VOA)			Soil/Sediment (Extractable)	2	1607.	Soil/Sediment (VOA)	1	120 ml.	Other												⑪ Analysis Lab: Rec'd by: Li Soma Date Rec'd: 6/17/87 Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.) OK - No Tags OK - No Tags	
	Number of Containers	Approximate Total Volume																														
Water (Extractable)																																
Water (VOA)																																
Soil/Sediment (Extractable)	2	1607.																														
Soil/Sediment (VOA)	1	120 ml.																														
Other																																
⑦ Shipping Information Federal Express Name of Carrier 11/17 Date Shipped: 4486830655 Airbill Number:																																
⑧ Sample Description <input type="checkbox"/> Surface Water <input type="checkbox"/> Mixed Media <input type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Solids <input type="checkbox"/> Leachate <input type="checkbox"/> Other (specify) _____			⑨ Sample Location SED-2 MATCHES INORGANIC SAMPLE MBK 540																													
⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)																																

Organics Analysis Data Sheet
(Page 1)

BK 272

0 0658

Laboratory Name: YOCK
Lab Sample ID No: 1086009
Sample Matrix: Soil
Data Release Authorized By: [Signature]

Case No: 7495
QC Report No: _____
Contract No: 68-01-7157
Date Sample Received: 6-17-87

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 6-23-87
Date Analyzed: 6-23-87
Conc/Dil Factor: 5.0 pH 6.75
Percent Moisture: (Not Decanted) 84%

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	<u>504</u>
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	<u>99B</u>
67-64-1	Acetone	<u>1500B</u>
75-15-0	Carbon Disulfide	<u>27</u>
75-35-4	1, 1-Dichloroethane	<u>254</u>
75-34-3	1, 1-Dichloroethane	<u>254</u>
156-60-5	Trans-1, 2-Dichloroethane	<u>254</u>
67-66-3	Chloroform	<u>160B</u>
107-06-2	1, 2-Dichloroethane	<u>254</u>
78-93-3	2-Butanone	<u>504</u>
71-55-6	1, 1, 1-Trichloroethane	<u>254</u>
56-23-5	Carbon Tetrachloride	<u>254</u>
108-05-4	Vinyl Acetate	<u>504</u>
75-27-4	Bromodichloromethane	<u>254</u>

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	<u>254</u>
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	<u>504</u>
75-25-2	Bromoform	<u>254</u>
108-10-1	4-Methyl-2-Pentanone	<u>504</u>
591-78-6	2-Hexanone	<u>504</u>
127-18-4	Tetrachloroethene	<u>35</u>
79-34-5	1, 1, 2, 2-Tetrachloroethane	<u>254</u>
108-88-3	Toluene	<u>3000B</u>
108-90-7	Chlorobenzene	<u>254</u>
100-41-4	Ethylbenzene	<u>860</u>
100-42-5	Styrene	<u>254</u>
	Total Xylenes	<u>6100</u>

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used.
Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero, (e.g., 10J). If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Story Name: York Labs
 Se No: EPA 7495

Sample Number
BK 272

Organics Analysis Data Sheet
 (Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 06-22-87

Date Analyzed: 07-14-87

Conc/Dil Factor: 10.0

Percent Moisture (Decanted) 40%

GPC Cleanup ☐ Yes ☒ No

Separatory Funnel Extraction ☐ Yes

Continuous Liquid - Liquid Extraction ☐ Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	3300u
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1, 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
521-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	
5-85-0	Benzoic Acid	16000u
111-91-1	bis(2-Chloroethoxy)Methane	3300u
120-83-2	2, 4-Dichlorophenol	
20-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
7-68-3	Hexachlorobutadiene	
99-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
7-47-4	Hexachlorocyclopentadiene	
68-06-2	2, 4, 6-Trichlorophenol	
95-95-4	2, 4, 5-Trichlorophenol	16000u
1-58-7	2-Chloronaphthalene	3300u
8-74-4	2-Nitroaniline	16000u
131-11-3	Dimethyl Phthalate	3300u
98-96-8	Acenaphthylene	3300u
9-09-2	3-Nitroaniline	16000u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	3300u
51-28-5	2, 4-Dinitrophenol	16000u
100-02-7	4-Nitrophenol	16000u
132-64-9	Dibenzofuran	3300u
121-14-2	2, 4-Dinitrotoluene	
608-20-2	2, 6-Dinitrotoluene	
84-68-2	Diethylphthalate	
7008-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	16000u
534-92-1	4, 6-Dinitro-2-Methylphenol	16000u
86-30-6	N-Nitrosodiphenylamine (1)	3300u
101-88-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-8	Pentachlorophenol	16000u
89-01-8	Phenanthrene	3300u
120-12-7	Anthracene	3300u
84-74-2	Di-n-Butylphthalate	5800u
206-44-0	Fluoranthene	3300u
129-00-0	Pyrene	3300u
85-68-7	Butybenzylphthalate	600J
91-94-1	3, 3'-Dichlorobenzidine	6600u
56-55-3	Benzo(a)Anthracene	3300u
117-81-7	bis(2-Ethylhexyl)Phthalate	840J
218-01-9	Chrysene	3300u
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a, h)Anthracene	
191-24-2	Benzo(g, h, i)Perylene	

(1) - Cannot be separated from diphenylamine

Laboratory Name: York LabsCase No. 7495

Sample Number

BK 272Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)GPC Cleanup ☐ Yes ☒ NoDate Extracted/Prepared: 6/22/87Separatory Funnel Extraction ☐ YesDate Analyzed: 6/30/87Continuous Liquid - Liquid Extraction ☐ YesConc/Dil Factor: 1.0Percent Moisture (decanted) 81.53

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	8.04
319-85-7	Beta-BHC	8.04
319-86-8	Delta-BHC	8.04
58-89-9	Gamma-BHC (Lindane)	8.04
76-44-8	Heptachlor	8.04
309-00-2	Aldrin	8.04
1024-57-3	Heptachlor Epoxide	8.04
959-98-8	Endosulfan I	8.04
60-57-1	Dieldrin	16.4
72-55-9	4, 4'-DDE	16.4
72-20-8	Endrin	16.4
33213-65-9	Endosulfan II	16.4
72-54-8	4, 4'-DDD	16.4
1031-07-8	Endosulfan Sulfate	16.4
50-29-3	4, 4'-DDT	16.4
72-43-5	Methoxychlor	80.4
53494-70-5	Endrin Ketone	16.4
57-74-9	Chlordane	80.4
8001-35-2	Toxaphene	160.4
12674-11-2	Aroclor-1016	80.4
11104-28-2	Aroclor-1221	80.4
11141-16-5	Aroclor-1232	80.4
53469-21-9	Aroclor-1242	80.4
12672-29-6	Aroclor-1248	80.4
11097-69-1	Aroclor-1254	160.4
11096-82-5	Aroclor-1260	160.4

 V_i = Volume of extract injected (ul) V_s = Volume of water extracted (ml) W_s = Weight of sample extracted (g) V_t = Volume of total extract (ul) V_s _____ or W_s 30.01 V_i 20.000 V_t 2.0

Laboratory Name: YORK LABORATORIES
 Case No: 7495

Sample Number
BK 272

Organics Analysis Data Sheet
 (Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. <u>1603204</u>	<u>BICYCLO [3.1.1]HEPTANE, 6,6-DIMETHYL-3-METHYLENE</u>	<u>VOA</u>	<u>28.99</u>	<u>2200 J</u>
2. <u>3854905</u>	<u>1,3,6-HEPTATRIENE, 2,5,5-TRIMETHYL</u>	<u> </u>	<u>29.19</u>	<u>1100 J</u>
3. <u>1195795</u>	<u>BICYCLO [2.2.1]HEPTANE, 1,2,3-TRIMETHYL</u>	<u> </u>	<u>33.36</u>	<u>3800 J</u>
4. <u>1031051</u>	<u>PROYL BENZENE</u>	<u>↓</u>	<u>36.88</u>	<u>1100 J</u>
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name: York Labs
 Case No: EPA 7495

Sample Number
BK 272

Organics Analysis Data Sheet
 (Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108872	METHYL CYCLOHEXANE	BNA	5.09	3900
12.	ALDOL COND. PROD.		7.24	3300
13.	ALDOL COND. PROD.		7.80	63000
14.	UNKNOWN, ALKANE		8.45	4500
15.			30.17	3700
16.	UNKNOWN		33.87	2600
17.	UNKNOWN		36.31	690000
18.	UNKNOWN		36.85	320000
19.	UNKNOWN		40.22	87000
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

REFERENCE #18

ANALYTICAL DATA

NAME: ALSY MANUFACTURING

SAMPLING DATE: 6/16/87

CASE NUMBER: 7459

INORGANICS

SAMPLE NUMBER	NYT7-GM1	NYT7-GM2	NYT7-BL1	NYT7-SM1	NYT7-S1	NYT7-S2	NYT7-S3	NYT7-S4	NYT7-SED1	NYT7-SED2
TRAFFIC REPORT NUMBER	MBJ 650	MBK 532	MBK 539	MBK 541	MBK 538	MBK 537	MBK 533	MBK 534	MBK 536	MBK 540
MATRIX	AQUEOUS	AQUEOUS	AQUEOUS	AQUEOUS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS	ug/L	ug/L	ug/L	ug/L	mg/Kg	mg/Kg	mg/Kg	mg/Kg	ug/Kg	ug/Kg
Aluminum	353000	123000	[134]	464	Q	Q	Q	Q	Q	Q
Antimony								77.6		
Arsenic	185	302			7.38	8.38	35.3	201		
Boron	1950	2210			[11.0]		[69.0]			[50]
Beryllium	9 E	36 E								
Cadmium	33 E	135 E			[1.65]			17.1		
Calcium	55500	62400	[290]	17500	[1660]	[413]	3450	6260	421	71800
Chromium	152	530		12	8.81	14.3		69.6		
Cobalt	74	168					[10.5]			
Copper	200	1620		137	244	1100	37.6	29100	120	365
Iron	263000	1170000	290 E	Q	8050	6570	21300	32200	3870	3680
Lead	144	341		6.9	33.0	20.7	61.4	706	9.97	360
Magnesium	14300	24900	[530]	[1190]	[831]	[584]	[1830]	[3880]		[2380]
Manganese	14700	2700		42	89.2	82.1	306	266	17.0	61.8
Mercury	0.53	3.21					0.33	0.18		1.0
Nickel	190 E	2340 E			530	2060	[24.0]	50700	226	[97.1]
Potassium	19600 E	30900 E		[940]	[308]		[684]	[494]		
Selenium	Q	Q	Q	Q				7.56		
Silver							6.78			
Sodium	31100	73800		[1830]						
Thallium										
Tin								944 E		97.1 E
Vanadium	303	1330			[9.91]	[9.37]	33.3	58.5		
Zinc	356	971	[13]	195	76.5	225	56.7	17100	40.1	974
Cyanide	Q	Q	Q	Q	19.0	128		182	17.8	

NOTES TO INORGANICS DATA:

Blank space - compound analyzed for but not detected

Q - analysis did not pass EPA QA/QC requirements

[] - compound present below contract-specified detection limits,
but above instrument detection limitB - compound found in laboratory blank as well as the sample and
indicates possible/probable blank contamination

E - value estimated due to laboratory interference

NR - analysis not required

SPECTRIX D.C. # 7459-02-02



U.S. ENVIRONMENTAL PROTECTION AGENCY
P.O. Box 818, Alexandria, VA 22313-703 / 557-2490 • FTS: 557-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBK 532

000003

<p>① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____</p>	<p>② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment</p>	<p>④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, Texas 77063 Attn: <u>Ken Fronda</u> Transfer Ship To:</p>
<p>⑤ Sampling Office: <u>EIT 2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>(201) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u></p>	<p>⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u></p>	<p>⑨ ANALYSIS LAB: Recd by: <u>MF Curry</u> Date Recd: <u>6-17-87</u></p>
<p>⑦ Sample Description: (Check One) <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) MATCHES ORGANIC SAMPLE NO. <u>AK244</u></p>	<p>⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Cyanide <u>GW-2</u></p>	<p>⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____ _____</p>

LAB COPY FOR RETURN TO SMO



U.S. ENVIRONMENTAL PROTECTION AGENCY Hazardous Waste Sample Management Office

P.O. Box 818, Alexandria, VA 22313-703/557-2490 • FTS 557-2490

Sample Number

MBK 533

INORGANICS TRAFFIC REPORT

① Case Number: <u>7459</u> Sample Site Name/Code: 	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment	④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Fronda</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT2</u> Sampling Personnel: (Name) <u>Kandy Rice</u> (Phone) <u>(201) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u>	⑦ ANALYSIS LAB: Recd by: <u>MFCW</u> Date Recd: <u>6-17-87</u>
⑧ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input checked="" type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) <u>BK 25</u> MATCHES ORGANIC SAMPLE NO.	⑨ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>S-3</u>	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.)

LAB COPY FOR RETURN TO SMO

000004



U.S. ENVIRONMENTAL PROTECTION AGENCY - Hazardous Waste Sample Management Unit

P.O. Box 818, Alexandria, VA 22313-703 • 557-2490 • FTS 357-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBK 534

① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment	④ Ship To: <u>Spectrix Corp.</u> <u>3911 Fondren</u> <u>Suite 100</u> <u>Houston, TX 77063</u> Attn: <u>Ken Erndon</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT 2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>(201) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u>	⑦ ANALYSIS LAB: Recd by: <u>MCChay</u> Date Recd: <u>6-17-87</u>
⑧ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input checked="" type="checkbox"/> Mixed Media <input type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) <u>BK 266</u> MATCHES ORGANIC SAMPLE NO.	⑨ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>S-4</u>	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____ _____

LAB COPY FOR RETURN TO SMO

000005


 U.S. ENVIRONMENTAL PROTECTION AGENCY
 P.O. Box 818, Alexandria, VA 22313-703/557-2490 • FTS: 557-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBK 536

000000

① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment	④ Ship To: <u>Spectrix Corp.</u> <u>3911 Fondren</u> <u>Suite 100</u> <u>Houston, TX 77063</u> Attn: <u>Ken Erondy</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT 2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>(201) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u>	⑦ ANALYSIS LAB: Recd by: <u>MF Cruz</u> Date Recd: <u>6-17-87</u>
⑦ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input checked="" type="checkbox"/> Mixed Media <input type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) <u>BK 268</u> MATCHES ORGANIC SAMPLE NO.	⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>SED-1</u>	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____

LAB COPY FOR RETURN TO SMO

SPECTRIX D.C. # 7459-02-02



U.S. ENVIRONMENTAL PROTECTION AGENCY Environmental Sample Management

P.O. Box 818, Alexandria, VA 22313-703 • 800-245-6240 • FTS 557-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBK 537

① Case Number: <u>7459</u> Sample Site Name/Code: 	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment	④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Erondu</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>(202) 225-6160</u> Sampling Date: (Begin) <u>1/16/87</u> (End) <u>1/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u>	⑦ ANALYSIS LAB: Recd by: <u>[Signature]</u> Date Recd: <u>6-17-87</u>
⑦ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input checked="" type="checkbox"/> Mixed Media <input type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) <u>BK 269</u> MATCHES ORGANIC SAMPLE NO.	⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>S-2</u>	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.)

LAB COPY FOR RETURN TO SMO

0000007


 U.S. ENVIRONMENTAL PROTECTION AGENCY
 P.O. Box 818, Alexandria, VA 22313-703 / 557-2490 • FTS 557-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBK 538

① Case Number: <u>7459</u> Sample Site Name/Code: 	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment	④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Eranda</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT 2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>(202) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>1486830644</u>	⑨ ANALYSIS LAB: Recd by: <u>MP Ray</u> Date Recd: <u>6-17-87</u>
⑦ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input checked="" type="checkbox"/> Solids <input checked="" type="checkbox"/> Other <u>Sample to Spike MSD</u> (specify) <u>MSD</u> MATCHES ORGANIC SAMPLE NO. <u>BK 270</u>	⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>S-1</u>	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.)

LAB COPY FOR RETURN TO SMO

800000

U.S. ENVIRONMENTAL PROTECTION AGENCY
P.O. Box 818, Alexandria, VA 22313-703 / 557-2490 • FTS: 557-2490**INORGANICS TRAFFIC REPORT**Sample Number
MBK 539

000000

① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____	② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment	④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Erndue</u> Transfer Ship To:
⑤ Sampling Office: <u>FIT2</u> Sampling Personnel: (Name) <u>Randy Rice</u> (Phone) <u>202-225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u>	⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u>	⑦ ANALYSIS LAB: Recd by: <u>MF Chung</u> Date Recd: <u>6-17-87</u>
⑧ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input checked="" type="checkbox"/> Solids <input checked="" type="checkbox"/> Other <u>TRIP BLANK</u> (specify) MATCHES ORGANIC SAMPLE NO. <u>BK271</u>	⑨ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Cyanide	⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____ _____

LAB COPY FOR RETURN TO SMO

SPECTRIX D.C.# 7459-02-02



U.S. ENVIRONMENTAL PROTECTION AGENCY

P.O. Box 818, Alexandria, VA 22313-703 / 557-2490 • FTS/557-2400

INORGANICS TRAFFIC REPORT

Sample Number

MBK 540

000010

<p>① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____</p>	<p>② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil/Sediment</p>	<p>④ Ship To: SPECTRIX CORP. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Fowles</u> Transfer Ship To:</p>
<p>⑤ Sampling Office: <u>FIT 2</u> Sampling Personnel: (Name) <u>RANDY RICE</u> (Phone) <u>(202) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u></p>	<p>⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u></p>	<p>⑦ ANALYSIS LAB: Recd by: <u>MFCamp</u> Date Recd: <u>6-17-87</u></p>
<p>⑧ Sample Description: (Check One) <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input checked="" type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) MATCHES ORGANIC SAMPLE NO. <u>OK 272</u></p>	<p>⑨ Mark Volume Level On Sample Bottle <input checked="" type="checkbox"/> Check Analysis required <input type="checkbox"/> Total Metals <input type="checkbox"/> Cyanide <u>SED-2</u></p>	<p>⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____ _____</p>

LAB COPY FOR RETURN TO SMO

SPECTRIX D.C. # 7459-02-02



U.S. ENVIRONMENTAL PROTECTION AGENCY
 P.O. Box 818, Alexandria, VA 22313-703/557-2490 • FTS: 557-2490

Sample Number:
MBK 541

INORGANICS TRAFFIC REPORT

<p>① Case Number: <u>7459</u> Sample Site Name/Code: _____ _____ _____</p>	<p>② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration</p> <p>③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment</p>	<p>④ Ship To: <u>SPECTRIX CORP.</u> <u>3911 Fondren</u> <u>Suite 100</u> <u>Houston, TX 77063</u> Attn: <u>Ken Erandue</u> Transfer Ship To:</p>
<p>⑤ Sampling Office: <u>FIT2</u> Sampling Personnel: (Name) <u>RANDY RICE</u> (Phone) <u>(202) 548-2360</u> Sampling Date: <u>6/14/87</u> (Begin) <u>6/14/87</u> (End) <u>6/14/87</u></p>	<p>⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u></p>	<p>⑦ ANALYSIS LAB: Recd by: <u>M. Erandue</u> Date Recd: <u>6-17-87</u></p>
<p>⑦ Sample Description: (Check One) <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input type="checkbox"/> Solids <input type="checkbox"/> Other _____ (specify) MATCHES ORGANIC SAMPLE NO. <u>PK 273</u></p>	<p>⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Cyanide <u>SN-1</u></p>	<p>⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) _____ _____ _____</p>

LAB COPY FOR RETURN TO SMO

000011



P.O. Box 818, Alexandria, VA 22313-703, 557-2490, FTS 557-2490

INORGANICS TRAFFIC REPORT

Sample Number

MBJ 650

SPECTRIX D.C. # 7459-02-02

000012

<p>① Case Number: <u>7459</u> Sample Site Name/Code: </p>	<p>② SAMPLE CONCENTRATION (Check One) <input checked="" type="checkbox"/> Low Concentration <input type="checkbox"/> Medium Concentration ③ SAMPLE MATRIX (Check One) <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil/Sediment</p>	<p>④ Ship To: Spectrix Corp. 3911 Fondren Suite 100 Houston, TX 77063 Attn: <u>Ken Erand</u> Transfer Ship To:</p>
<p>⑤ Sampling Office: <u>ELT-2</u> Sampling Personnel: (Name) <u>RANDY RICE</u> (Phone) <u>(201) 225-6160</u> Sampling Date: (Begin) <u>6/16/87</u> (End) <u>6/16/87</u></p>	<p>⑥ Shipping Information: Name Of Carrier: <u>Federal Express</u> Date Shipped: <u>6/16/87</u> Airbill Number: <u>4486830644</u></p>	<p>⑨ ANALYSIS LAB: Recd by: <u>Mr. Cruz</u> Date Recd: <u>6-17-87</u></p>
<p>⑦ Sample Description: (Check One) <input checked="" type="checkbox"/> Surface Water <input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Leachate <input type="checkbox"/> Mixed Media <input checked="" type="checkbox"/> Solids <u>sample to spike</u> <input checked="" type="checkbox"/> Other <u>MS/MSD</u> (specify) MATCHES ORGANIC SAMPLE NO. <u>BT850</u></p>	<p>⑧ Mark Volume Level On Sample Bottle Check Analysis required <input checked="" type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Cyanide <u>GW-1</u></p>	<p>⑩ Sample Condition On Receipt: (eg. broken, leakage, chain of custody, etc.) </p>

LAB COPY FOR RETURN TO SMO

CHECKLIST

- ✓ SECTION II
- ✓ Sample Summary Sheet
 - ✓ Cover Page IADS
 - ✓ Form I IADS
 - ✓ QC Report Forms

000013

SPECTRIX
SAMPLE SUMMARY SHEET

EPA Case # 7459

Doc. Con. # 7459 - 02 - 07

Spectrix Lab # 8706053

Date 7-14-87

Lab. Sample No.	EPA Sample No.	DIGESTION				ANALYSES			
		HNO ₃ / H ₂ O ₂	HNO ₃ / HCl	ICP	DATE REC'D	FURN.- AA	Hg	CN	% SOLIDS
01A, 01B	LCS	✓	✓	✓	6-17	✓	✓	✓	—
02A, 02B	MBJ 650	✓	✓	✓		✓	✓	✓	✓
03A, 03B	✓ dwp	✓	✓	✓		✓	✓	✓	✓
04A, 04B	✓ sp	✓	✓	✓		✓	✓	✓	—
05A, 05B	MBK 532	✓	✓	✓		✓	✓	✓	—
06A, 06B	MBK 539	✓	✓	✓		✓	✓	✓	—
07A, 07B	MBK 541	✓	✓	✓		✓	✓	✓	—
08A, 08B	MBK 538	✓	✓	✓		✓	✓	✓	✓
09A, 09B	✓ dwp	✓	✓	✓		✓	✓	✓	✓
10A, 10B	✓ sp	✓	✓	✓		✓	✓	✓	—
11A, 11B	MBK 533	✓	✓	✓		✓	✓	✓	✓
12A, 12B	MBK 534	✓	✓	✓		✓	✓	✓	✓
13A, 13B	MBK 536	✓	✓	✓		✓	✓	✓	✓
14A, 14B	MBK 537	✓	✓	✓		✓	✓	✓	✓
15A, 15B	MBK 540	✓	✓	✓	✓	✓	✓	✓	✓
BIK	—	✓	✓	✓	—	✓	✓	✓	—
BIK	—	✓	✓	✓	—	✓	—	—	—
Std	—	✓	✓	✓	—	✓	✓	✓	—
COMPL. DATE:		6-23	6-23	7-16	—	6-26	6-19	7-6	6-23
ANALYST:		CR	CR	HB CR	—	DCA/HT	DCA	HT	CR

CDF

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

Spectrix D.C. Control# 7459-02-06

Date 7-14-87

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name SPECTRIX-HOUSTON

Case No. 7459

SOW No. 784

Q.C. Report No. 118

Sample Numbers

<u>EPA No.</u>	<u>Lab ID No.</u>	<u>EPA No.</u>	<u>Lab ID No.</u>
<u>MBJ 650</u>	<u>8706053-02A,02B</u>	<u>MBK 533</u>	<u>8706053-11A,11B</u>
<u>" dup</u>	<u>" 03A,03B</u>	<u>" 534</u>	<u>" - 12A,12B</u>
<u>" SP</u>	<u>" 04A,04B</u>	<u>" 536</u>	<u>" - 13A,13B</u>
<u>MBK 532</u>	<u>" 05A,05B</u>	<u>" 537</u>	<u>" - 14A,14B</u>
<u>MBK 539</u>	<u>" 06A,06B</u>	<u>" 540</u>	<u>" - 15A,15B</u>
<u>MBK 541</u>	<u>" 07A,07B</u>		
<u>MBK 538</u>	<u>" 08A,08B</u>		
<u>" dup</u>	<u>" 09A,09B</u>		
<u>" SP</u>	<u>" 10A,10B</u>		

Comments: The flag "A" in this data package is used to
identify an estimated value resulting from several
duplicates that fail to meet the $\pm 20\%$ criteria and "Z"
denotes analysis using GFAA, Zeeman background
Correction.

ICP Interelement and background corrections applied? Yes ☒ No ☐.

If yes, corrections applied before ☒ or after ☐ generation of raw data.

Footnotes:

NR - not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP/Flame AA) or F (for furnace).

U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

S - Indicates value determined by Method of Standard Addition.

R - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 318 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBJ 650Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-02A,02BQC REPORT NO. 118Elements Identified and Measured

Concentration:

Low ✓Medium Matrix: Water ✓Soil Sludge Other ug/L or mg/kg dry weight (Circle One)

1. Aluminum	<u>353000</u>	<u>P</u>	13. Magnesium	<u>14300</u>	<u>P</u>
2. Antimony	<u>50u</u>	<u>P</u>	14. Manganese	<u>14700</u>	<u>P</u>
3. Arsenic	<u>185 g</u>	<u>F</u>	15. Mercury	<u>0.53</u>	<u>CV</u>
4. Barium	<u>1950</u>	<u>P</u>	16. Nickel	<u>190</u>	<u>J P</u>
5. Beryllium	<u>9</u>	<u>J P</u>	17. Potassium	<u>19600</u>	<u>J P</u>
6. Cadmium	<u>33</u>	<u>R J P</u>	18. Selenium	<u>5u</u>	<u>R F Z</u>
7. Calcium	<u>55500</u>	<u>P</u>	19. Silver	<u>8u</u>	<u>R P</u>
8. Chromium	<u>152</u>	<u>P</u>	20. Sodium	<u>31100</u>	<u>P</u>
9. Cobalt	<u>74</u>	<u>P</u>	21. Thallium	<u>10u</u>	<u>F Z</u>
10. Copper	<u>200</u>	<u>P</u>	22. Tin	<u>29u</u>	<u>R P</u>
11. Iron	<u>263000</u>	<u>P</u>	23. Vanadium	<u>303</u>	<u>P</u>
12. Lead	<u>144</u>	<u>F Z</u>	24. Zinc	<u>356</u>	<u>P</u>
Cyanide	<u>10u</u>	<u>Color</u>	Percent Solids (%)	<u> </u>	<u> </u>

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Lab Manager Ken U. End

000016

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 813 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK532Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-05A,05BQC REPORT NO. 118Elements Identified and Measured

Concentration: Low ☒ Medium ☐
 Matrix: Water ☒ Soil ☐ Sludge ☐ Other ☐

ug/L or mg/kg dry weight (Circle One)

1. Aluminum	123000	P	13. Magnesium	24900	P
2. Antimony	50u	P	14. Manganese	2700	P
3. Arsenic	302	F	15. Mercury	3.21	CV
4. Barium	2210	P	16. Nickel	2340	JP
5. Beryllium	36	JP	17. Potassium	30900	JP
6. Cadmium	135	RJP	18. Selenium	5u R FZ	
7. Calcium	62400	P	19. Silver	8u	R P
8. Chromium	530	P	20. Sodium	73800	P
9. Cobalt	168	P	21. Thallium	10u	FZ
10. Copper	1620	P	22. Tin	29u	RP
11. Iron	1,170,000	P	23. Vanadium	1330	P
12. Lead	341	FZ	24. Zinc	971	P
Cyanide	10u Color		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Lab Manager Ken A. Eward

000017

Form 1

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 318 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK539Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-06A,06BQC REPORT NO. 118Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☒Soil ☐Sludge ☐Other ☐ug/L or mg/kg dry weight (Circle One)

1. Aluminum	<u>[134]</u>	<u>P</u>	13. Magnesium	<u>[530]</u>	<u>P</u>
2. Antimony	<u>50u</u>	<u>P</u>	14. Manganese	<u>4u</u>	<u>P</u>
3. Arsenic	<u>10u</u>	<u>F</u>	15. Mercury	<u>0.2u</u>	<u>CV</u>
4. Barium	<u>16u</u>	<u>P</u>	16. Nickel	<u>25u</u>	<u>JP</u>
5. Beryllium	<u>2u</u>	<u>JP</u>	17. Potassium	<u>350u</u>	<u>JP</u>
6. Cadmium	<u>3u</u>	<u>RJP</u>	18. Selenium	<u>5u</u>	<u>R FZ</u>
7. Calcium	<u>[290]</u>	<u>P</u>	19. Silver	<u>8u</u>	<u>R P</u>
8. Chromium	<u>7u</u>	<u>P</u>	20. Sodium	<u>190u</u>	<u>P</u>
9. Cobalt	<u>17u</u>	<u>P</u>	21. Thallium	<u>10u</u>	<u>FZ</u>
10. Copper	<u>15u</u>	<u>P</u>	22. Tin	<u>29u</u>	<u>R P</u>
11. Iron	<u>290 u</u>	<u>P</u>	23. Vanadium	<u>1u</u>	<u>P</u>
12. Lead	<u>5u</u>	<u>FZ</u>	24. Zinc	<u>[13]</u>	<u>P</u>
Cyanide	<u>10u Color</u>		Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: The flag "A" for Fe indicates that the value is an estimate from several duplicate analyses

Lab Manager

Ken H. End

000018

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 313 - Alexandria, VA 22313
 703/557-2490 FTS: 3-557-2490

EPA Sample No.

MBK 541Date 7-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-07A, 07BQC REPORT NO. 118

Elements Identified and Measured

Concentration: Low ☒ Medium ☐
 Matrix: Water ☒ Soil ☐ Sludge ☐ Other ☐

(ug/L) or mg/kg dry weight (Circle One)

1. Aluminum	464	P	13. Magnesium	[1190]	P
2. Antimony	50u	P	14. Manganese	42	P
3. Arsenic	10u	F	15. Mercury	0.2u	CV
4. Barium	16u	P	16. Nickel	25u	J P
5. Beryllium	2u	J P	17. Potassium	[940]	J P
6. Cadmium	3u	R P J	18. Selenium	5u	R F Z
7. Calcium	17500	P	19. Silver	8u	R P
8. Chromium	12	P	20. Sodium	[1830]	P
9. Cobalt	17u	P	21. Thallium	10u	F Z
10. Copper	137	P	22. Tin	29u	R P
11. Iron	430	P	23. Vanadium	14u	P
12. Lead	6.9	F Z	24. Zinc	195	P
Cyanide	10u	Color	Percent Solids (%)		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken U. Enslin

000019

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 318 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 538Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-08A,08BQC REPORT NO. 118Elements Identified and Measured

Concentration: Low ☒ Medium ☐
 Matrix: Water ☐ Soil ☒ Sludge ☐ Other ☐

ug/L or mg/kg dry weight (Circle One)

1. <u>Aluminum</u>	<u>5400</u>	<u>P</u>	13. <u>Magnesium</u>	<u>[831]</u>	<u>P</u>
2. <u>Antimony</u>	<u>28u</u>	<u>R P</u>	14. <u>Manganese</u>	<u>89.2</u>	<u>P</u>
3. <u>Arsenic</u>	<u>7.38</u>	<u>F</u>	15. <u>Mercury</u>	<u>0.11u</u>	<u>CV</u>
4. <u>Barium</u>	<u>[11.0]</u>	<u>P</u>	16. <u>Nickel</u>	<u>530</u>	<u>P</u>
5. <u>Beryllium</u>	<u>1.1u</u>	<u>P</u>	17. <u>Potassium</u>	<u>[3087]</u>	<u>P</u>
6. <u>Cadmium</u>	<u>[1.65]</u>	<u>P</u>	18. <u>Selenium</u>	<u>2.8u</u>	<u>R F Z</u>
7. <u>Calcium</u>	<u>[1660]</u>	<u>P</u>	19. <u>Silver</u>	<u>4.4u</u>	<u>P</u>
8. <u>Chromium</u>	<u>8.81</u>	<u>P</u>	20. <u>Sodium</u>	<u>100u</u>	<u>P</u>
9. <u>Cobalt</u>	<u>9.4u</u>	<u>P</u>	21. <u>Thallium</u>	<u>5.5u</u>	<u>F Z</u>
10. <u>Copper</u>	<u>244</u>	<u>P</u>	22. <u>Tin</u>	<u>15u</u>	<u>J P</u>
11. <u>Iron</u>	<u>8050</u>	<u>P</u>	23. <u>Vanadium</u>	<u>[9.91]</u>	<u>P</u>
12. <u>Lead</u>	<u>33.0</u>	<u>R F Z</u>	24. <u>Zinc</u>	<u>76.5</u>	<u>P</u>
Cyanide	<u>19.0</u>	<u>Color</u>	Percent Solids (%)	<u>90.8</u>	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken U. End

000020

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 537Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-14A,14BQC REPORT NO. 118Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☐Soil ☒Sludge ☐Other ☐ug/L or (ug/kg dry weight) (Circle One)

1. Aluminum	4520	P	13. Magnesium	<u>[534]</u>	P
2. Antimony	<u>28u</u>	R P	14. Manganese	<u>82.1</u>	P
3. Arsenic	<u>8.38</u>	F	15. Mercury	<u>0.11u</u>	CV
4. Barium	<u>8.8u</u>	P	16. Nickel	<u>2060</u>	P
5. Beryllium	<u>1.1u</u>	P	17. Potassium	<u>200u</u>	P
6. Cadmium	<u>1.6u</u>	P	18. Selenium	<u>2.8u</u>	RFZ
7. Calcium	<u>[413]</u>	P	19. Silver	<u>4.4u</u>	P
8. Chromium	<u>14.3</u>	P	20. Sodium	<u>100u</u>	P
9. Cobalt	<u>9.4u</u>	P	21. Thallium	<u>5.5u</u>	FZ
10. Copper	<u>1100</u>	P	22. Tin	<u>15u</u>	JP
11. Iron	<u>6570</u>	P	23. Vanadium	<u>[9.37]</u>	P
12. Lead	<u>20.7</u>	R FZ	24. Zinc	<u>225</u>	P
Cyanide	<u>128</u>	Color	Percent Solids (%)	<u>90.7</u>	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken V. Sed

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 818 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 533Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-11A,11BQC REPORT NO. 118Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☐Soil ☒Sludge ☐Other ☐ug/L or (mg/kg dry weight) (Circle One)

1. Aluminum	18500 P	13. Magnesium	[1830] P
2. Antimony	31u R P	14. Manganese	306 P
3. Arsenic	35.3 S F	15. Mercury	0.33 CV
4. Barium	[69.0] P	16. Nickel	[24.0] P
5. Beryllium	1.2u P	17. Potassium	[684] P
6. Cadmium	1.8u P	18. Selenium	3.1u RFZ
7. Calcium	3450 P	19. Silver	6.78 P
8. Chromium	16.0 P	20. Sodium	120u P
9. Cobalt	[10.5] P	21. Thallium	6.2u FZ
10. Copper	37.6 P	22. Tin	17u JP
11. Iron	21300 P	23. Vanadium	33.3 P
12. Lead	61.4 S R FZ	24. Zinc	56.7 P
Cyanide	6.2u Color	Percent Solids (%)	81.1

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken U. [Signature]

000021

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 318 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 534Date 7-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-12A,12BQC REPORT NO. 118

Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☐Soil ☒Sludge ☐Other ☐ug/L or (mg/kg dry weight) (Circle One)

1. Aluminum	48000 P	13. Magnesium	[3880] P
2. Antimony	77.6 R P	14. Manganese	266 P
3. Arsenic	201 + F	15. Mercury	0.18 CV
4. Barium	16u P	16. Nickel	50700 P
5. Beryllium	2u P	17. Potassium	[494] P
6. Cadmium	17.1 P	18. Selenium	7.56 RFZ
7. Calcium	6260 P	19. Silver	8.1u P
8. Chromium	69.6 P	20. Sodium	190u P
9. Cobalt	17u P	21. Thallium	10u FZ
10. Copper	29100 P	22. Tin	944 JP
11. Iron	32,200 P	23. Vanadium	58.5 P
12. Lead	706 RFZ	24. Zinc	17100 P
Cyanide	182 Color	Percent Solids (%)	49.6

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken U. Ed

000022

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 313 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 536Date 7-14-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-13A,13BQC REPORT NO. 118

Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☐Soil ☒Sludge ☐Other ☐ug/L or (mg/kg dry weight) (Circle One)

1. Aluminum	<u>1100</u>	<u>P</u>	13. Magnesium	<u>140u</u>	<u>P</u>
2. Antimony	<u>26u</u>	<u>R P</u>	14. Manganese	<u>17.0</u>	<u>P</u>
3. Arsenic	<u>5.1u</u>	<u>F</u>	15. Mercury	<u>0.10u</u>	<u>CV</u>
4. Barium	<u>8.2u</u>	<u>P</u>	16. Nickel	<u>226</u>	<u>P</u>
5. Beryllium	<u>1.0u</u>	<u>P</u>	17. Potassium	<u>180u</u>	<u>P</u>
6. Cadmium	<u>1.5u</u>	<u>P</u>	18. Selenium	<u>2.6u</u>	<u>RFZ</u>
7. Calcium	<u>421</u>	<u>P</u>	19. Silver	<u>4.1u</u>	<u>P</u>
8. Chromium	<u>3.6u</u>	<u>P</u>	20. Sodium	<u>98u</u>	<u>P</u>
9. Cobalt	<u>8.7u</u>	<u>P</u>	21. Thallium	<u>5.1u</u>	<u>FZ</u>
10. Copper	<u>120</u>	<u>P</u>	22. Tin	<u>14u</u>	<u>J P</u>
11. Iron	<u>3870</u>	<u>P</u>	23. Vanadium	<u>8.7u</u>	<u>P</u>
12. Lead	<u>9.97</u>	<u>RFZ</u>	24. Zinc	<u>40.1</u>	<u>P</u>
Cyanide	<u>17.8</u>	<u>Color</u>	Percent Solids (%)	<u>97.3</u>	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager Ken A. Ed

000023

Form I

U.S. EPA Contract Laboratory Program
 Sample Management Office
 P.O. Box 318 - Alexandria, VA 22313
 703/557-2490 FTS: 8-557-2490

EPA Sample No.

MBK 540Date 7-14-87INORGANIC ANALYSIS DATA SHEETLAB NAME SPECTRIX-HoustonCASE NO. 7459SOW NO. 784LAB SAMPLE ID. NO. 87-06-053-15A,15BQC REPORT NO. 118Elements Identified and Measured

Concentration:

Low ☒Medium ☐Matrix: Water ☐Soil ☒Sludge ☐Other ☐ug/L or mg/kg dry weight (Circle One)

1. Aluminum	1420	P	13. Magnesium	<u>[2380]</u>	P
2. Antimony	<u>150u</u>	R P	14. Manganese	<u>61.8</u>	P
3. Arsenic	<u>9u</u>	F	15. Mercury	<u>1.0</u>	104 KCV
4. Barium	<u>[50]</u>	P	16. Nickel	<u>[97.1]</u>	P
5. Beryllium	<u>5.9u</u>	P	17. Potassium	<u>1100u</u>	P
6. Cadmium	<u>8.8u</u>	P	18. Selenium	<u>15u</u>	R FZ
7. Calcium	<u>71800</u>	P	19. Silver	<u>24u</u>	P
8. Chromium	<u>21u</u>	P	20. Sodium	<u>560u</u>	P
9. Cobalt	<u>50u</u>	P	21. Thallium	<u>29u</u>	FZ
10. Copper	<u>365</u>	P	22. Tin	<u>97.1</u>	J P
11. Iron	<u>3680</u>	P	23. Vanadium	<u>50u</u>	P
12. Lead	<u>360 + RFZ</u>		24. Zinc	<u>974</u>	P
Cyanide	<u>29u</u>	Color	Percent Solids (%)	<u>17.0</u>	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Lab Manager

Ken U. End

000025

